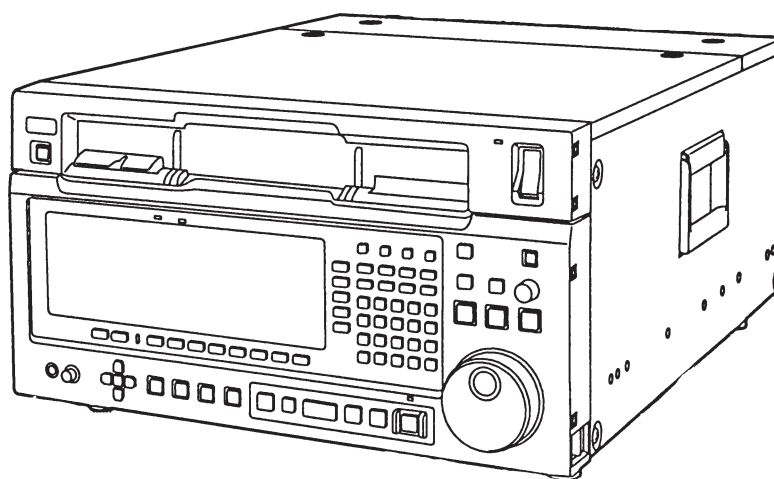


Service Manual



- Sec. 1** *Service Information*
- Sec. 2** *Disassembly Procedures*
- Sec. 3** *Mechanism*
- Sec. 4** *Electrical Adjustments*
- Sec. 5** *Block Diagrams*
- Sec. 6** *Schematic Diagrams*
- Sec. 7** *Circuit Board Diagrams*
- Sec. 8** *Exploded Views &
Replacement Parts List*

Digital HD Video Cassette Recorder
AJ-HD3700HP
AJ-HD3700HE
HD-SD Format Converter Boards
AJ-UDC3700P



Panasonic

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products deal with in this service manual by anyone else could result in serious injury or death.

Specifications

AJ-HD3700HP/E

Power supply:	AJ-D3700HP: AC 120 V, 50–60 Hz AJ-D3700HE: AC 220–240 V, 50 Hz
Power consumption:	330 W (including optional board)

General

Operating temperature	41°F to 104°F (5°C to 40°C)
Operating humidity	10%–90% (without condensation)
Weight	77 lbs (35 kg)
Dimensions	16 ³ / ₄ " (W)× 8 ¹¹ / ₁₆ " (H)× 20- ¹ / ₂ " (D) [424× 220× 520 mm] (excluding search dial)
Recording format	HDD5 format
Recording tracks	Digital video: 12 tracks/1 field Digital audio: 12 tracks/4 channels (8 channels) 4-channel: 480/59.94i 8-channel: 1080/23.98p, 1080/24p, 1080/50i 4-channel/8-channel selection: 1080/59.94i, 720/59.94p Cue audio/Time code/CTL: 1 track
Tape speed	167.228 mm/sec (1080/59.94i, 720/59.94p, 480/59.94i) 139.496 mm/sec (1080/50i) 133.782 mm/sec (1080/23.98p, 1080/24p)
Tapes used	¹ / ₂ " metal (L/M) cassettes
Recording duration	L: 124 min (1080/59.94i, 720/59.94p and 480i) 155 min (1080/23.98p and 1080/24p) 149 min (1080/50i) M: 63 min (1080/59.94i, 720/59.94p and 480i)
FF/REW time	Less than 195 sec (L), less than 115 sec (M)
Servo lock time	Less than 1 sec. (standby ON)
Tape timer accuracy	± 1 frame (using CTL)
Editing accuracy	± 0 frame (using time code)
AT playback range	– 1 to + 2 times normal speed
Search speed	Max. ± 50 times normal speed

Video system

HDTV recording format	Frame frequency	Active sample/line	Active line/frame		
●1080/23.98p (SMPTE 274M)	23.98 Hz	Y: 1920 samples P _B /P _R : 960 samples	1080 lines		
●1080/24.00p	24.00 Hz	Y: 1920 samples P _B /P _R : 960 samples	1080 lines		
●1080/59.94i (SMPTE 274M)	29.98 Hz	Y: 1920 samples P _B /P _R : 960 samples	1080 lines		
●1080/50i	25.00 Hz	Y: 1920 samples P _B /P _R : 960 samples	1080 lines		
●720/59.94p (SMPTE 296M)	59.94 Hz	Y: 1280 samples P _B /P _R : 640 samples	720 lines		
●Sampling/quantization	4:2:2 sampling, Y: 10-bit sampling				
●Recording format	HD D5 format image compression system: In-field DCT+ VLC				
SDTV recording format					
●Television format	525 lines/ 59.94 fields/ 2:1 interface				
●No. of active samples/lines	Y: 720 samples/line P _B P _R : 360 samples/line				
●No. of active lines/ No. of fields	255 lines/field				
●Sampling/quantization	4:2:2 sampling, Y: 10-bit sampling				
●Recording format	Non-compressed digital component recording (D5 format)				
Output with format converter installed					
●Tape format	HDTV output		SDTV output		
	HD_MAIN	HD_MONI	SD_SDI_MAIN	SD_SDI_MONI	Analog composite
1080/59.94i	1080/59.94i	1080/59.94i	480/59.94i	480/59.94i	NTSC
720/59.94p	720/59.94p	720/59.94p	480/59.94i	480/59.94i	NTSC
1080/23.98p (At the SYSTEM 50 Hz setting)	720/59.94p	720/59.94p	480/59.94p	480/59.94i	NTSC
	1080/23.98P _s F	1080/23.98P _s F	480/59.94i	480/59.94i	NTSC
	1080/23.98P _s F	1080/59.94i	—	—	—
	1080/23.98P _s F	1080/23.98P _s F	480/59.94p	480/59.94i	NTSC
	1080/59.94i	1080/59.94i	480/59.94i	480/59.94i	NTSC
	1080/59.94i	1080/59.94i	480/59.94p	480/59.94i	NTSC
	720/59.94p	720/59.94p	480/59.94i	480/59.94i	NTSC
	720/59.94p	720/59.94p	480/59.94p	480/59.94i	NTSC
	1080/50i	1080/50i	576/50i	576/50i	PAL
1080/24.00p	1080/24P _s F	1080/24P _s F	—	—	—
	1080/24P _s F	1080/60i	—	—	—
	1080/60i	1080/60i	—	—	—
	720/60p	720/60p	—	—	—
1080/50i	1080/50i	1080/50i	576/50i	576/50i	PAL
480/59.94i	1080/59.94i	1080/59.94i	480/59.94i	480/59.94i	NTSC

Digital audio

No. of channels	4-channel (480/59.94i), 8-channel (1080/23.98p, 1080/24p, 1080/50i), 4-channel/8-channel selection (1080/59.94i, 720/59.94p)
Sampling frequency	48 kHz
Quantizing characteristics	20 bits/sample (24-bit possible at DATA mode)
Frequency response	20 Hz–20 kHz \pm 0.5 dB
Dynamic range	More than 100 dB (1 kHz, "A" weighted)
Distortion	Less than 0.03% (1 kHz, reference level)
Crosstalk	Less than – 80 dB (1 kHz, between 2 channels)
Wow & flutter	Below measurable limits
Headroom	20 dB
Input/output level	+ 4/0/– 20 dBm selectable
De-emphasis	T1=50 μ sec/T2=15 μ sec (automatic selecting)

Cue audio

Frequency response	100 Hz–12 kHz \pm 3 dB
S/N ratio	More than 44 dB (3% distortion)
Distortion	Less than 2% (1 kHz reference signal)
Wow & flutter	Less than 0.15% (NAB unweighted)
Input/output level	+ 4/0/– 20 dBm selectable
I/O level variable range	– ∞ to + 12 dB

Video input/output signals

HD serial input	1.5 Gbps (Embedded audio, Time code) (Complying with SMPTE 291M, 292M)	(BNC \times 2)
SD serial input	4:2:2 component SDI (Complying with SMPTE 259M, 272M)	(BNC \times 2)
HD reference input	Analog tri-level sync \pm 0.3 V Loop through, with 75 Ω ON/OFF function	(BNC \times 2)
SD reference input	Analog composite Loop through, with 75 Ω ON/OFF function	(BNC \times 2)
HD serial output	1.5 Gbps	(BNC \times 3)
HD serial monitor output	1.5 Gbps (Time code superimposed)	(BNC \times 1)
SD serial output	4:2:2 component SDI output (Complying with SMPTE 259M, 272M)	(BNC \times 2)
SD serial monitor output	Time code superimposed	(BNC \times 1)
Analog composite output	Analog composite	(BNC \times 2)
Analog monitor output	Analog composite (Time code superimposed)	(BNC \times 1)

Digital audio input/output signals

Digital input	CH1/2, CH3/4 (operates when CH5/6, CH7/8 are at 1080/23.98p, 1080/24p and 1080/50i, operates when the 8-channel version has been selected for the 1080/59.94i or 720/59.94p system format) AES-3 75 Ohms, unbalanced	(BNC× 4)
Digital output	CH1/2, CH3/4 (operates when CH5/6, CH7/8 are at 1080/23.98p, 1080/24p and 1080/50i, operates when the 8-channel version has been selected for the 1080/59.94i or 720/59.94p system format) AES-3 75 Ohms, unbalanced	(BNC× 4)

Analog input/output signals

Analog input	CH1/2/3/4: Max. + 24 dBm, 600Ω/high impedance selectable, balanced input	(XLR× 4)
Cue line input	Max. + 18 dBm, 600Ω/high impedance selectable, balanced input	(XLR× 1)
Analog output	CH1/2/3/4: Max. + 24 dBm (at 600Ω load)/low impedance, balanced output	(XLR× 4)
Cue line output	Max. + 18 dBm (at 600Ω load)/low impedance, balanced output	(XLR× 1)
Monitor output	L/R Max. + 24 dBm (at 600Ω load)/low impedance, balanced output	(XLR× 2)
Headphone output	Level variable	(1/4" Phone× 1)

Other input/output signals

Time code input	2.4 V ± 1.4 Vp-p, 10 kΩ, balanced	(XLR× 1)
Time code output	2.0 V ± 0.5 Vp-p, low impedance, balanced	(XLR× 1)
Waveform output	RF ENV (CH0, 1, 2, 3)/RF EYE (CH0, 1, 2, 3)/CTL (R/P, CONF)/Time code switching	
SD SYNC output	Black burst	(BNC× 1)
HD SYNC output	Analog HD tri-level sync ± 0.3 V	(BNC× 1)

Remote signals

RS-422A input	RS-422A interface	(D-SUB 9P× 1)
RS-422A output	RS-422A interface	(D-SUB 9P× 1)
RS-422A input/output	RS-422A interface	(D-SUB 9P× 1)
RS-232C	RS-232C interface	(D-SUB 25P× 1)
Parallel I/O	Parallel communication	(D-SUB 50P× 1)
V/A control	Video remote control	(D-SUB 15P× 1)
Control panel	For connecting front control panel	(20P× 1)

Accessory

1 Power cord (AJ-HD3700HP), 2 Power cord (AJ-HD3700HE)
--

Options (sold separately)

AJ-UDC3700	HD-SD format converter board
------------	------------------------------

Specifications

AJ-UDC3700P

UP DOWN PCB (VEP83498)

Dimensions:	3 ¹⁵ / ₁₆ (W) × 1/4 (H) × 6 ⁵ / ₁₆ (D)
Weight:	0.286 lbs (130 g)
Video input:	HD; 1080i (50, 59.94) 1080p (23.98/24) 720p (59.94)
	SD; 525i (59.94)
Video output:	HD; 1080i (50, 59.94/60) 1080p (23.98/24) 720p (59.94/60)
	SD; 525i (59.94) 525p (59.94)[4:2:0p]

Frequency characteristics	
settings:	WIDE/STANDARD/NARROW
Enhanced level:	0/+1.5/+3/+6 dB
Video level	
adjustment ranges:	Y output gain; ± 3 dB P _B output gain; ± 3 dB P _R output gain; ± 3 dB Black level; ± 100 mV
Screen size setting:	DOWN; FIT_H/FIT_V/FIT_H&V/14:9/13:9 UP; FIT_H/FIT_V/FIT_H&V

420P SUB PCB (VEP83543)

Dimensions:	2 ³ / ₈ (W) × 1/4 (H) × 3 ³ / ₈ (D)
Weight:	0.220 lbs (100 g)
Video input/output:	525p (59.94)[4:2:0p]

Weight and dimensions when shown are approximate.
Specifications are subject to change without notice.

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. The resistance value must be more than $5M\Omega$.

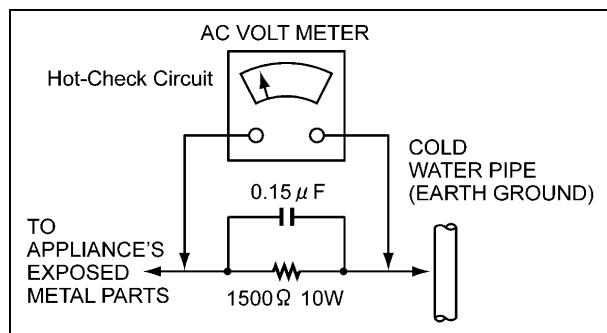


Figure1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
Do not use an isolation transformer for this check.
2. Connect a $1.5k\Omega$, 10W resistor, in parallel with a $0.15\mu F$ capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.15 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 0.1 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
Alternatively, obtain and wear a commercially available discharging wrist trap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it.
(most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpacked replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

X-RADIATION

WARNING

1. The potential source of X-radiation in EVF sets is the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 10kV without causing x-radiation.

Note: It is important to use an accurate periodically calibrated high voltage meter.

3. Measure the High Voltage. The meter (electric type) reading should indicate $2.5kV, \pm 0.15kV$. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure. To prevent an x-radiation possibility, it is essential to use the specified picture tube.

Panasonic

SECTION 1

SERVICE INFORMATION

CONTENTS

1. Servicing Fixtures & Tools	INF-1
2. Alignment Tape.....	INF-6
2-1. D3/D5/HDD5 adjustment and confirmation tape list.....	INF-6
2-2. Required Adjustment tape and Confirmation tape for AJ-HD3700H.....	INF-6
2-3. Recording signal of adjustment and confirmation tape.	INF-7
2-3-1. VFM6080EC (NTSC) (D3 adjustment tape No. 1)	INF-7
2-3-2. VFM6180EC (PAL) (D3 adjustment tape No. 1)	INF-7
2-3-3. VFM6081EC (NTSC) (D3 adjustment tape No. 2)	INF-7
2-3-4. VFM6181EC (PAL) (D3 adjustment tape No. 2)	INF-8
2-3-5. VFM6081EG (NTSC) (D3 adjustment tape No. 2)	INF-8
2-3-6. VFM6082EC (NTSC) (D3 adjustment tape No. 1)	INF-8
2-3-7. VFM6086EC (NTSC) (D3 adjustment tape No. 3)	INF-8
2-3-8. VFM6186EC (PAL) (D3 adjustment tape No. 3)	INF-8
2-3-9. VFM6086ET (NTSC) (D3 adjustment tape No. 3).....	INF-8
2-3-10. VFM6086EG (NTSC) (D3 adjustment tape No. 3)	INF-8
2-3-11. VFM6087EC (NTSC) (D3 adjustment tape No. 1)	INF-8
2-3-12. VFM6087ET (NTSC) (D3 adjustment tape No. 1).....	INF-9
2-3-13. VFM5080JR (NTSC) (D5 adjustment tape No. 4).....	INF-9
2-3-14. VFM5180JR (PAL) (D5 adjustment tape No. 4).....	INF-9
2-3-15. VFM5080JP (NTSC) (D5 adjustment tape No. 4).....	INF-9
2-3-16. VFM5081JR (NTSC) (D5 adjustment tape No. 5).....	INF-9
2-3-17. VFM5181JR (PAL) (D5 adjustment tape No. 5).....	INF-9
2-3-18. VFM5082JR (NTSC) (D5 adjustment tape No. 6).....	INF-9
2-3-19. VFJ5083MT (HDD5 confirmation tape No. 7)	INF-10
2-3-20. VFJ5084MT (HDD5 confirmation tape No. 8)	INF-10
2-3-21. VFJ5085MT (HDD5 confirmation tape No. 9)	INF-10
2-3-22. VFJ5087MT (HDD5 confirmation tape).....	INF-10
2-3-23. VFM5089NT (HDD5 color bar adjustment tape No. 10)	INF-10
2-3-24. VFM5088NT (HDD5 playback check tape No.11).....	INF-10
3. List of Recommended Measuring Equipment.....	INF-11
4. Maintenance.....	INF-12
4-1. Maintenance Schedule	INF-12
4-2. Maintenance Parts Location	INF-13
5. Manual Tape Eject Method.....	INF-15
6. Cleaning Procedure.....	INF-16
6-1. Cleaning Procedure Outline	INF-16
6-2. Video Head Cleaning Method : (Daily)	INF-16

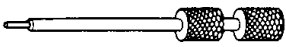
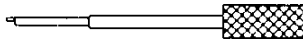
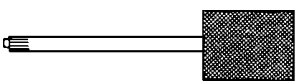
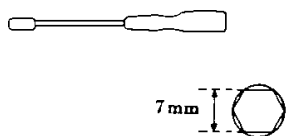
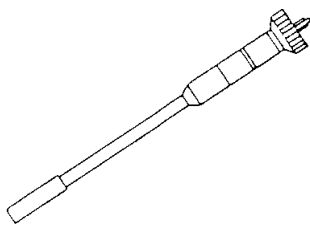
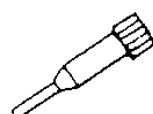
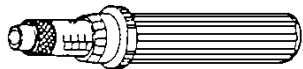
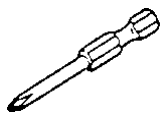
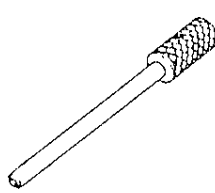
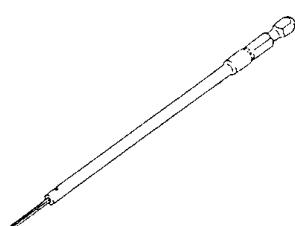
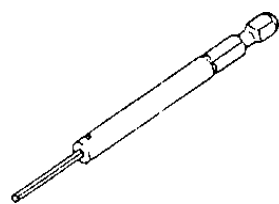
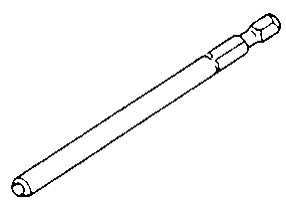
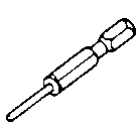
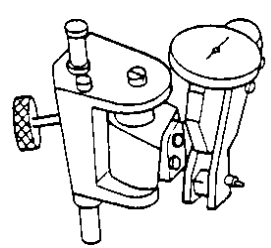
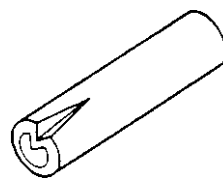
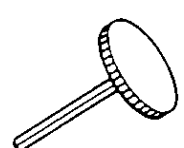
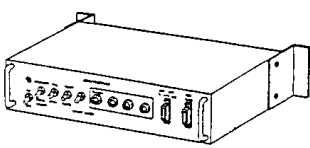
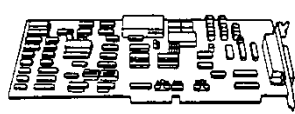
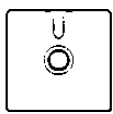

6-3.	Lower Drum Cleaning Method : (Weekly).....	INF-16
6-4.	A/C Head and Full Erase Head Cleaing Method.	INF-16
6-5.	A/C Head Cleaner Pad Cleaning Method: (Weekly).....	INF-17
6-6.	Pinch Roller and Capstan Post Roller Cleaning method: (Weekly).....	INF-17
6-7.	Tape Post Cleaning Method : (Weekly)	INF-17
6-8.	Reel Table Cleaning Method : (Monthly).....	INF-17
6-9.	Cleaning inside of VTR (sweeping dust).....	INF-18
6-10.	Lubrication of the Gears and Sliding Surfaces	INF-18
6-10-1.	Types of Grease.....	INF-18
6-10-2.	Grease up Method	INF-18
6-10-3.	Greasing Locations	INF-19
7.	ERROR RATE DISPLAY & CONFIRMATION	INF-21
7-1.	Error Rate Display procedure	INF-21
7-2.	Error Rate Confirmation Procedure	INF-22
8.	INTERNAL SWITCH SETTING	INF-23
8-1.	SW6501 on M1 Board.....	INF-23
8-2.	SW6071 on M1 Board.....	INF-23
8-3.	SW2001 on M1 Board.....	INF-23
8-4.	Other Switches	INF-24
8-5.	Switch Location.....	INF-24
9.	INTERNAL LED INDICATION.....	INF-25
9-1.	LED on M1 board.....	INF-25
9-2.	LED on S4 board.....	INF-26
10.	SOFTWARE VERSION, PLD SOFTWARE VERSION, & HOUR METER CONFIRMATION PROCEDURE.....	INF-27
10-1.	Hour Meter Display	INF-27
10-2.	Software Version Display	INF-27
10-3.	PLD Version Display	INF-28
11.	SOFTWARE VERSION UPGRADE METHOD.....	INF-29
11-1.	For Software Version Upgrade.	INF-29
11-2.	Version Upgrade Procedure of A/V Microprocessor.....	INF-33
11-2-1.	Preparations	INF-33
11-2-2.	Version Upgrade Procedure	INF-34
11-3.	Version Upgrade procedure of PLD (ALTERA)	INF-37
11-3-1.	Preparation.....	INF-37
11-3-2.	Connection	INF-37
11-3-3.	Boot up the Version Up Software and Version Up Procedure	INF-38
11-4.	Version Upgrade procedure of PLD (XILINX).....	INF-43
11-4-1.	Preparation.....	INF-43
11-4-2.	Connection	INF-43
11-4-3.	Boot up the Version Up Software and Version Up Procedure	INF-43
12.	CAUTION for M1 BOARD EXCHANGE	INF-50
12-1.	Transfer the NVRAM data.....	INF-50
12-2.	Confirmation of Default setting.....	INF-50
12-3.	L1 SDRAM CLK Timing Setting. (Video Field Memory read timing adjustment).....	INF-50
12-4.	Confirmation item to exchange M1 board.....	INF-50
13.	Circuit Board Layout (AJ-HD3700H).....	INF-52
14.	Explanation of Overall Block	INF-53
14-1.	SDI IN Board (S5)	INF-53
14-1-1.	HD SDI Input (HD SDI RX Board).....	INF-53
14-1-2.	SD SDI Input Signals	INF-53
14-1-3.	HD SDI Signal Process	INF-54

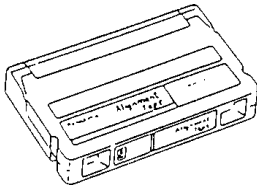
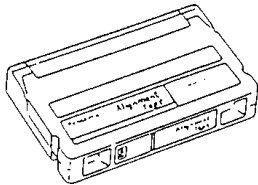
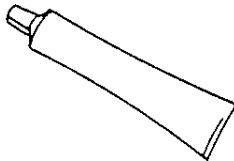
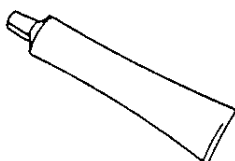
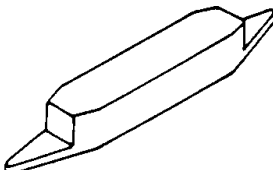
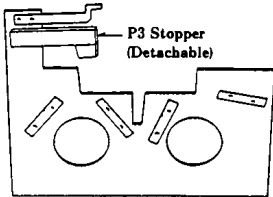
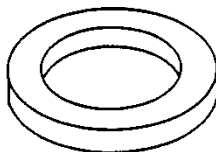
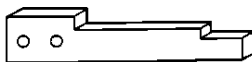
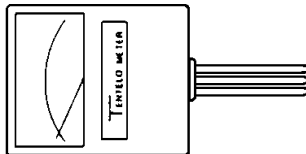
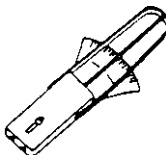
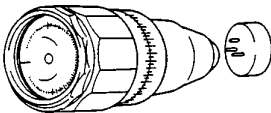
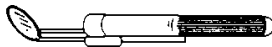
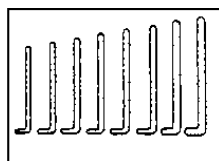
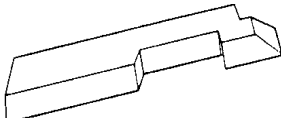
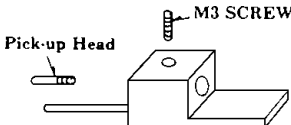
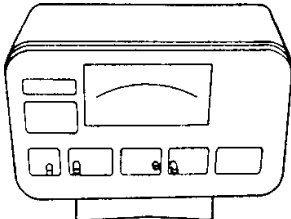
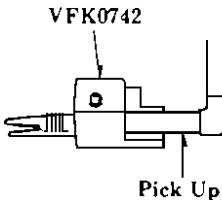

14-1-4. SD Signal Process	INF-54
14-1-5. INPUT CHECK	INF-54
14-2. D5 REC PB board (L1)	INF-55
14-2-1. REC VIDEO signal.....	INF-55
14-2-2. PB VIDEO signal.....	INF-58
14-2-3. REC AUDIO Signal	INF-59
14-2-4. PB AUDIO signal	INF-59
14-3. PB PROCESS board (L2).....	INF-60
14-4. SDI OUT PC board (S4)	INF-65
15. The checkpoint after specified defective Board (S5/S4/L2/L1).....	INF-66
15-1 S5 (SDI IN).....	INF-66
15-1-1. In case of picture problem with HD input.	INF-66
15-1-2. Flow chart of confirmation procedure for the problem with HD input	INF-67
15-1-3. In case of picture problem with SD input.	INF-68
15-1-4. Flow chart of confirmation procedure for the problem with SD input.....	INF-68
15-2. S4 (SDI OUT).....	INF-68
15-2-1. In case of picture problem with HD input.....	INF-68
15-2-2. Flow chart of confirmation or procedure for the problem with HD output	INF-68
15-2-3. In case of picture problem with SD input.	INF-69
15-2-4. Flow chart of confirmation procedure for the problem with SD output.	INF-69
15-3. L2 (PB PROC)	INF-70
15-3-1. Video Problem	INF-70
15-3-2. Synchronization problem	INF-70
15-4. L1 (D5 REC PB).....	INF-71
15-4-1. Recording Problem.	INF-71

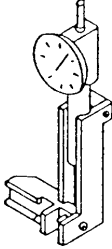
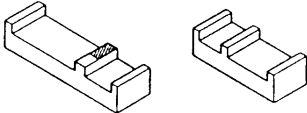
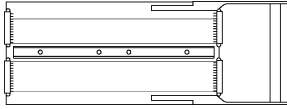
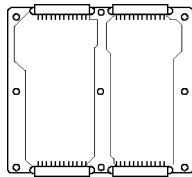
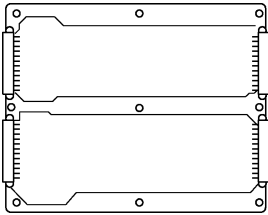
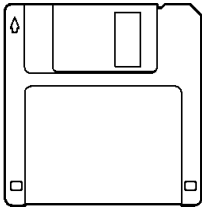
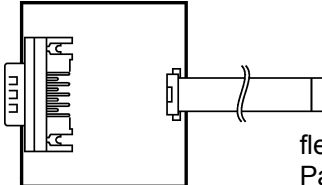
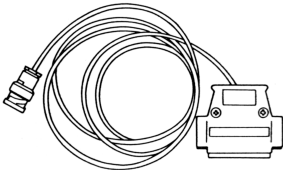
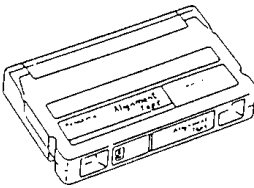
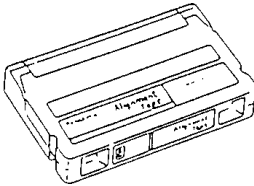
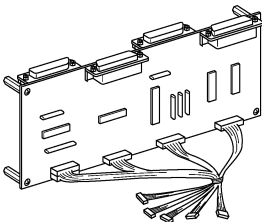
1. Servicing Fixtures & Tools

No.	NEW	PART No.	FIXTURE & TOOL NAME	PURPOSE
1		VFK0293	Post driver	Post height adjustment
2		VFK0358	Eccentric screwdriver(ϕ 2)	Tension neutral voltage adjustment
3		VFK0357	Eccentric screwdriver(ϕ 1.5)	1. Pinch solenoid position adjustment 2. Inclined post angle adjustment 3. Tension arm neutral voltage adjustment 4. A/C Head X value adjustment
4		VFK0446	Fine adjustment screwdriver	1. Loading completion detect SW adjustment 2. Unloading completion detect SW adjustment 3. Sub loading completion detect SW adjustment 4. Sub Unloading completion detect SW adjustment 5. Pinch press lever position adjustment
5		VFK0676	Nut Driver (7mm)	A/C head height adjustment
6		VFK0740	Torque wrench A	Center drum adjustment
7		VFK0741	Adaptor for Torque wrench A	Center drum adjustment
8		VFK0878	Torque wrench B	Center drum replacement and adjustment A/C head adjustment
9		VFK0881	Cross point adaptor (For VFK0878)	Install a center drum
10		VFK0910	Post driver (1)	Post height adjustment
11		VFK0912	Post driver (3) (1.5mm)	P1, P4 - P12 post height adjustment
12		VFK0920	Post driver (4) (2mm)	A/C Head X value adjustment
13		VFK0955	Post driver (2) (0.9mm)	P2, P3 post height adjustment
14		VFK0956	Hex. Head bit	Install a upper drum
15		VFK0737B	Drum replacement tool	Center drum replacement and adjustment
16		VFK0779	Position change driver	Center drum replacement and adjustment.
17		VFK0811	Hex. Wrench	Head height adjustment
18		VFK0832A	D3/D5 Linearity adjustment and head height adjustment tool	1. Tape linearity measurement 2. Head height adjustment
19		VFK1300	A/D converter board	Linearity/Head height adjustment (for QUATECH)
20		VFK0989	Linearity/Head height adjustment software	Linearity/Head height adjustment (for ELMEC)
		VFK0990	Linearity/Head height adjustment software	Linearity/Head height adjustment (for QUATEC)
21		VFK0909A	A/D converter board connector	Linearity/Head height adjustment
22		VFM6081EC	D3 Alignment tape No. 2 (NTSC)	Electrical adjustment, Mechanical adjustment
23		VFM6086EC	D3 Alignment tape No. 3 (NTSC)	Linearity measurement
24		VFM5080JR	D5 Alignment tape No. 4 (NTSC)	Electrical adjustment
25		MOR265	Molyton grease (Black)	Grease up for metal parts
26		VFK0749	Froiral grease (White)	Grease up for plastic parts
27		VFK0363	Post height Fixture	Post height adjustment

No.	NEW	PART No.	FIXTURE & TOOL NAME	PURPOSE
28		VFK0719	Mech. Neutral adjustment plate	1. P3 post inclined angle adjustment 2. Inclined post angle adjustment (1) 3. Inclined post angle adjustment (2) 4. Tension neutral voltage adjustment
29		VFK0772	Reel height adjustment tool	Reel height adjustment
30		VFK0924	P3 stopper	Tension adjustment
31		VFK0132	Back tension meter	Tension adjustment
32		VFK66	Fan type tension gauge	Pinch press lever position adjustment
33		VFK71	Dial torque gauge (150g)	1. Loading torque adjustment
34		VFK0133	Dial torque gauge (1200g)	2. Supply reel torque adjustment
35		VFK0134	Dial torque gauge adaptor	3. Take-up reel torque adjustment
36		VFK0948	Check light	Tape transport check
37		VFK0326	Hex. Wrench M2 (set)	Tension magnet height adjustment
		VFK0326	Hex. Wrench M2.6 (set)	1. Inclined post angle adjustment (1) 2. Tension adjustment (fine)
		VFK0326	Hex. Wrench M3 (set)	
38		VFK0722	Inclined post angle fixture	Inclined post angle adjustment (2)
39		VFK0742	Micro meter pick up fixture	1. P3 post inclined angle adjustment 2. Inclined post angle adjustment (1)
40		VFK1031	Pick-up	Inclined post angle adjustment
41		TESA TTA-20	Micro meter	Inclined post angle adjustment
42		TESA GT-22	Micro meter pick-up	Inclined post angle adjustment
43		VFK0771	Calibration block for micro meter	Inclined post angle adjustment
44		VFK1008	A/C head tilt measurement tool	A/C head tilt confirmation
45		VFK1007	Calibration plate (1)	A/C head tilt confirmation
		VFK1177	Calibration plate (2)	
46		VFK0864	L extension board	Electrical adjustment
47		VFK0882	S extension board	Electrical adjustment
48	NEW	VFK1578	M extension board	Electrical adjustment
49	NEW	VFK1248J	Flash memory version up software	For flash ROM version up
50		VFK1304A	Flash memory version up tool	For flash ROM version up
51	NEW	VFK1647	CUE REC L Cable	FE Head Height adjustment
52	NEW	VFM5089NT	HDD5 color bar alignment tape	EQ adjustment
53	NEW	VFM5088NT	HDD5 playback check tape	EQ adjustment
54	NEW	VFK1590	C PLD Writer	For PLD version up

1 VFK0293 Post driver (0.9mm) 	2 VFK0357(Φ1.5) 3 VFK0358(Φ2) Eccentric screwdriver 	4 VFK0446 Fine adjustment screwdriver (3mm Φ) 	5 VFK0676 Nut Driver (7mm) 
6 VFK0740 Torque wrench A 	7 VFK0741 Adaptor screwdriver 	8 VFK0878 Torque wrench B 	9 VFK0881 Cross point adaptor (For VFK0878) 
10 VFK0910 Post driver (1) 	11 VFK0912 Post driver (3) 	12 VFK0920 Post driver (4) 	13 VFK0955 Post driver (2) 
14 VFK0956 Hex. Head bit 	15 VFK0737B Drum replacement tool 	16 VFK0779 Position change driver 	17 VFK0811 Hex. Wrench 
18 VFK0832A D3/D5 Linearity adjustment and head height adjustment tool 	19 VFK1300 A/D Converter BOARD (DAQ-12 Quatech) 	20 VFK0989B (For ELEMEC) VFK0990B (For QUATECH) 	21 VFK0909A A/D converter board Connector 

<div>23</div> <div>VFM6081EC (NTSC)</div> <div>24</div> <div>VFM6086EC (NTSC)</div> <div>D3 Alignment tape</div> <div></div>	<div>24</div> <div>VFM5080JR (NTSC)</div> <div>D5 Alignment tape</div> <div></div>		
<div>25</div> <div>MOR265</div> <div>Molyton (Black) grease</div> <div></div>	<div>26</div> <div>VFK0749</div> <div>Froiral grease (White) (for plastic parts)</div> <div></div>	<div>27</div> <div>VFK0363</div> <div>Post Height Fixture</div> <div></div>	<div>28</div> <div>VFK0719</div> <div>Mech. Neutral adjustment plate</div> <div></div>
<div>29</div> <div>VFK0772</div> <div>Reel height adjustment tool</div> <div></div>	<div>30</div> <div>VFK0924</div> <div>P3 stopper</div> <div></div>	<div>31</div> <div>VFK0132</div> <div>Back tension meter</div> <div></div>	<div>32</div> <div>VFK66</div> <div>Fan type tension gauge</div> <div></div>
<div>33</div> <div>VFK71(150g max.)</div> <div>34</div> <div>VFK0133(1200g max.)</div> <div>Dial torque gauge</div> <div>35</div> <div>VFK0134</div> <div>Dial torque gauge adaptor</div> <div></div>	<div>36</div> <div>VFK0948</div> <div>Check light</div> <div></div>	<div>37</div> <div>VFK0987</div> <div>Hex. Wrench (set)</div> <div></div>	<div>38</div> <div>VFK0722</div> <div>Inclined post angle fixture</div> <div></div>
<div>39</div> <div>VFK0742</div> <div>Micro meter pick up fixture</div> <div>40</div> <div>VFK1031</div> <div>Pick-up</div> <div></div>	<div>41</div> <div>TESA TTA-20</div> <div>Micro meter</div> <div></div>	<div>42</div> <div>TESA GT-22</div> <div>Micro meter pick-up</div> <div></div>	<div>43</div> <div>VFK0771</div> <div>Calibration block for micro meter</div> <div></div>

44 VFK1008 A/C head tilt measurement tool 	45 VFK1007 Calibration plate (1) VFK1177 Calibration plate (2) 	46 VFK0864 L extension board 	47 VFK0882 S extension board 
48 VFK1578 M extension board 	49 VFK1248J Flash memory version up software 	50 VFK1304A Flash memory version up tool (VFK1304A includes a flexible cable VWJ20E5500L0)  flexible cable Part No. : VWJ20E5500L0	
51 VFK1647 CUE REC L Cable 	52 VFM5089NT HDD5 Color Bar Alignment Tape 	53 VFM5088NT HDD5 Playback Check Tape 	54 VFK1590 C PLD WRITER 

2. Alignment Tape

2-1. D3/D5/HDD5 adjustment and confirmation tape list

Part No.	No.	Signal Format	Recording Format	Applicable Format	Type of Tape	Type of Cass.	Purpose	Remark
VFM6080EC	No.1	NTSC	D3	D3	Thick	D3 S	Elec. Adj.	
VFM6180EC	No.1	PAL	D3	D3	Thick	D3 S	Elec. Adj.	
VFM6081EC	No.2	NTSC	D3	D3/D5/HDD5	Thick	D3 S	RF & Mech. Adj.	
VFM6181EC	No.2	PAL	D3	D3/D5/HDD5	Thick	D3 S	RF & Mech. Adj.	
VFM6081EG	No.2	NTSC	D3	HDD5	Thick	D3 M	RF & Mech. Adj.	For HD Portable
VFM6082EC	No.2	NTSC	D3	D3	Thick	D3 S	Elec. Adj.	Set up 0% color bar
VFM6086EC	No.3	NTSC	D3	D3/D5/HDD5	Thick	D3 S	Linearity Measurement	
VFM6186EC	No.3	PAL	D3	D3/D5/HDD5	Thick	D3 S	Linearity Measurement	
VFM6086ET	No.3	NTSC	D3	HDD5	Thick	HD M	Linearity Measurement	HD cassette use
VFM6086EG	No.3	NTSC	D3	HDD5	Thick	D3 M	Linearity Measurement	For HD Portable
VFM6087EC	No.1	NTSC	D3	D3	Thick	D3 S	Set Up	Set up 0% color bar
VFM6087ET	No.1	NTSC	D3	HDD5	Thick	HDD5	Set Up	Set up 0% color bar
VFM5080JR	No.4	NTSC	D5	D5/HDD5	Thick	D5 S	Elec. Adj.	
VFM5180JR	No.4	PAL	D5	D5/HDD5	Thick	D5 S	Elec. Adj.	
VFM5080JP	No.4	NTSC	D5	HDD5	Thick	D5 M	Elec. Adj.	For HD Portable
VFM5081JR	No.5	NTSC	D5	D5/HDD5	Thick	D5 S	Y/C Timing Adj.	Bow tie 13.5MHz
VFM5181JR	No.5	PAL	D5	D5/HDD5	Thick	D5 S	Y/C Timing Adj.	Bow tie 13.5MHz
VFM5082JR	No.6	NTSC	D5	D5/HDD5	Thick	D5 S	Y/C Timing Adj.	Bow tie 18MHz
VFJ5083MT	No.7	—	HDD5	HDD5	Thin	HD M	Picture conf.	To Conf. only
VFJ5084MT	No.8	—	HDD5	HDD5	Thin	HD M	Picture conf.	To Conf. only
VFJ5085MT	No.9	—	HDD5	HDD5	Thin	HD M	Picture conf.	To Conf. only
VFJ5087JS	—	—	HDD5	HDD5	Thin	HD M	Picture conf. (1080I/720P)	To Conf. only
VFM5089NT	No.10	—	HDD5	HDD5	Thick	HD M	RF ADJ.	
VFM5088NT	No.11	—	HDD5	HDD5	Thick	HD M	RF ADJ.	To Conf. only

2-2. Required Adjustment tape and Confirmation tape for AJ-HD3700H.

Adjustment and confirmation tapes indicated in following table are required for servicing AJ-HD3700H.

NOTE: PAL adjustment tape can not be used for AJ-HD3700H.

Part No.	Purpose
VFM6081EC	RF & Mechanical Adjustment
VFM6086EC	Linearity Measurement
VFM5080JR	Electrical & Mechanical Adjustment
VFM5089NT	RF Adjustment
VFM5088NT	RF Adjustment

2-3. Recording signal of adjustment and confirmation tape.

2-3-1. VFM6080EC (NTSC) (D3 adjustment tape No. 1)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Color Bar	Confirmation of video level	1KHz -20dB	Confirmation of audio level	1KHz 0VU	Confirmation of cue level
10:00	Pulse & bar				1KHz -10VU	
14:00	H sweep	Confirmation of frequency characteristic	-----	-----	50,100,5KHz	Confirmation of frequency characteristic
15:00					10KHz,15KHz -10VU (30 seconds per each tone)	
18:00	RF CW	Linearity pre adjustment and PG shifter adjustment	-----	-----	-----	-----

2-3-2. VFM6180EC (PAL) (D3 adjustment tape No. 1)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Color Bar	Confirmation of video level	1KHz -18dB	Confirmation of audio level	1KHz 0VU	Confirmation of cue level
10:00	Pulse & bar				1KHz -10VU	
14:00	H sweep	Confirmation of frequency characteristic	-----	-----	50,100,5KHz	Confirmation of frequency characteristic
15:00					10KHz,15KHz -10VU (30 seconds per each tone)	
18:00	RF CW	Linearity pre adjustment and PG shifter adjustment	-----	-----	-----	-----

2-3-3. VFM6081EC (NTSC) (D3 adjustment tape No. 2)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	RF CW	Linearity pre adjustment and PG shifter adjustment	-----	-----	15KHz 0VU	A/C Head Height Adjustment and azimuth adjustment
16:00	RF CW (FIELD 0 & SEGMENT 0 REC)	A/C Head horizontal position adjustment (X value adjustment)	-----	-----	-----	-----
23:00	Color bar (75% shuffling OFF)	AT and RF adjustment	1KHz -20dB	Confirmation of audio level	1KHz 0VU	Confirmation of cue level

2-3-4. VFM6181EC (PAL) (D3 adjustment tape No. 2)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	RF CW	Linearity pre adjustment and PG shifter adjustment	----	----	15KHz 0VU	A/C Head Height Adjustment and azimuth adjustment
16:00	RF CW (FIELD 0 & SEGMENT 0 REC)	A/C Head horizontal position adjustment (X value adjustment)	----	----	----	----
23:00	Color bar (75% shuffling OFF)	AT and RF adjustment	1KHz -18dB	Confirmation of audio level	1KHz 0VU	Confirmation of cue level

2-3-5. VFM6081EG (NTSC) (D3 adjustment tape No. 2)

Recording signal is exactly same as VFM6081EC, but cassette size is different.

2-3-6. VFM6082EC (NTSC) (D3 adjustment tape No. 1)

Recording signal is same as VFM6080EC except Color bar. It is set up 0% Color bar.

2-3-7. VFM6086EC (NTSC) (D3 adjustment tape No. 3)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Analog modulated Signal (47KHz)	Linearity measurement	----	----	----	----

2-3-8. VFM6186EC (PAL) (D3 adjustment tape No. 3)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Analog modulated Signal (47KHz)	Linearity measurement	----	----	----	----

2-3-9. VFM6086ET (NTSC) (D3 adjustment tape No. 3)

Recording signal is exactly same as VFM6086EC, but cassette is different.

2-3-10. VFM6086EG (NTSC) (D3 adjustment tape No. 3)

Recording signal is exactly same as VFM6086EC, but cassette size is different.

2-3-11. VFM6087EC (NTSC) (D3 adjustment tape No. 1)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Color bar (Set up 0%)	Set Up	----	----	----	----

2-3-12. VFM6087ET (NTSC) (D3 adjustment tape No. 1)

Recording signal is exactly same as VFM6087EC, but cassette is different.

2-3-13. VFM5080JR (NTSC) (D5 adjustment tape No. 4)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Color bar (13.5MHz)	Confirmation of video level	1KHz -20dB	Confirmation of audio level	1KHz 0VU	Confirmation of cue level
15:00					1KHz -10VU	Confirmation of frequency characteristic
16:00					50,100,5KHz 10KHz,15KHz -10VU (30 seconds per each tone)	

2-3-14. VFM5180JR (PAL) (D5 adjustment tape No. 4)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Color bar (13.5MHz)	Confirmation of video level	1KHz -18dB	Confirmation of audio level	1KHz 0VU	Confirmation of cue level
15:00					1KHz -10VU	Confirmation of frequency characteristic
16:00					50,100,5KHz 10KHz,15KHz -10VU (30 seconds par each tone)	

2-3-15. VFM5080JP (NTSC) (D5 adjustment tape No. 4)

Recording signal is exactly same as VFM5080JR, but cassette size is different.

2-3-16. VFM5081JR (NTSC) (D5 adjustment tape No. 5)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	BOW TIE (13.5MHz)	YC TIMING adjustment	-----	-----	-----	-----

2-3-17. VFM5181JR (PAL) (D5 adjustment tape No. 5)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	BOW TIE (13.5MHz)	YC TIMING adjustment	-----	-----	-----	-----

2-3-18. VFM5082JR (NTSC) (D5 adjustment tape No. 6)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	BOW TIE (18MHz)	YC TIMING adjustment	-----	-----	-----	-----

2-3-19. VFJ5083MT (HDD5 confirmation tape No. 7)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Color bar (1035/59.94I)	Confirmation of picture	1KHz 18dBFS	– Confirmation of audio level	-----	-----

2-3-20. VFJ5084MT (HDD5 confirmation tape No. 8)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	Multi Burst (1035/59.94I)	Confirmation of picture	1KHz 18dBFS	– Confirmation of audio level	-----	-----

2-3-21. VFJ5085MT (HDD5 confirmation tape No. 9)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	LAMP (1035/59.94I)	Confirmation of picture	1KHz 18dBFS	– Confirmation of audio level	-----	-----

2-3-22. VFJ5087MT (HDD5 confirmation tape)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	100% color bar (1080/59.94I)	Confirmation of picture	1KHz –20dB	Confirmation of audio level	-----	-----
10:00	100% color bar (720/59.94P)					

2-3-23. VFM5089NT (HDD5 color bar adjustment tape No. 10)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	75% color bar (1080/23P 8ch)	EQ Adjustmet	1KHz –20dB(8ch)	Confirmation of audio level	-----	-----
10:00	100% color bar (1080/23P 8ch)					

2-3-24. VFM5088NT (HDD5 playback check tape No.11)

TIME (min)	VIDEO		PCM AUDIO		CUE	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	75% color bar (1080/59I 8ch)	Confirmation of picture and error rate	1KHz 20dB(8ch)	– Confirmation of audio level	-----	-----
4:00	75% color bar (1080/23P 8ch)					
8:00	75% color bar (1080/50I 8ch)					
12:00	75% color bar (1080/24P 8ch)					
16:00	75% color bar (720/59P 8ch)					

NOTE: In VFM5088NT several different format signals are recorded. Therefore noise may appear on screen at the point where format is changed.

3. List of Recommended Measuring Equipment

MODEL NO. (Exsample)	NAME	REMARK
TSG1910 (NTSC)	NTSC analog composite signal generator (with CF OUT)	Tektronix
TSG1411 (PAL)	PAL analog composite signal generator (with CF OUT)	
1760 (op. SC) or 1780R	SCH meter (NTSC)	
	Waveform monitor (NTSC)	
	Vector scope (NTSC)	
1761 (op. SC) or 1781R	SCH meter (PAL)	
	Waveform monitor (PAL)	
	Vector scope (PAL)	
	Oscilloscope	
	Digital voltmeter (D.V.M.)	
	Frequency counter	
	Audio noise meter	
	Audio analyzer	
	Spectrum analyzer	
	HD Signal Generator	
	SD Signal Generator	
	HD Waveform Monitor	
	SD Waveform Monitor	
	HD Monitor	
	SD Monitor	

4. Maintenance

4-1. Maintenance Schedule

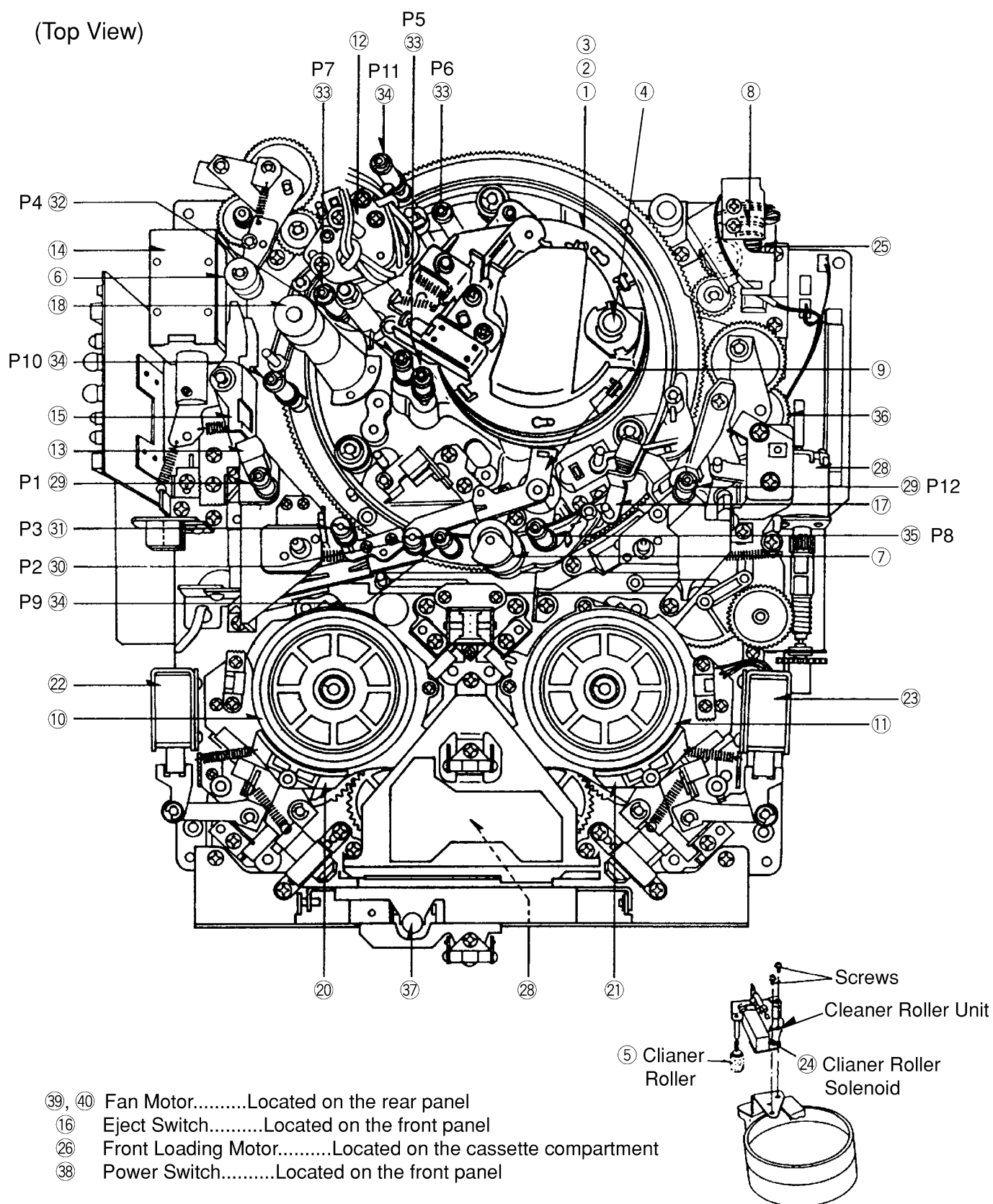
The maintenance schedule shown in the following chart is recommendation for standard preventive maintenance. This is not the life of various parts. The life is influenced by temperature, humidity, dust, etc. Please refer to the latest information, as the maintenance schedule since the part numbers may be revised.

Location No.	Part Name	Part Number	Qty.	Hours of use (unit: hours)																	
				1	3	4	6	7	9	10	12	13	15	16	18	19	21	22	24		
				500	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
—	Cleaning of the tape travel	—	—	C : Every 500 hours																	
1	Center Cylinder Unit	VEH0923KIT	1	R	R	R		R	R	R		R	R	R		R	R	R			
2	Brush Unit	VXS0256	1	R	R	R		R	R	R		R	R	R		R	R	R			
3	Cylinder Unit	VEG1556	1				R				R				R				R		
4	Air Filter	VMZ2735	1	R	R	R		R	R	R		R	R	R		R	R	R			
5	Cleanner Roller	VXP2105	1	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
6	A/C Head Cleanner Pad	VMF0367	2	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
7	Pinch Roller Arm Unit	VXL2926	1	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
8	Loading Motor Belt	VDV0156	1	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
9	Tension Adj. Plate Unit	VXA4395	1		R		R		R		R		R		R		R		R		
—	Each Gears	— — — —	—		G		G		G		G		G		G		G		G		
—	Tape Tension	— — — —	—		A		A		A		A		A		A		A		A		
10	S Reel Table	VXR0230	1				R				R				R				R		
11	T Reel Table	VXR0230	1				R				R				R				R		
12	A/C Head Unit	VED0351	1				R				R				R				R		
13	Full Erase Head	VBS0024	1				R				R				R				R		
14	Pinch Solenoid	VSJ0101	1				R				R				R				R		
15	Pinch Press Lever Unit	VXL2100	1				R				R				R				R		
16	Eject SW Unit	VEP80790A	1				R				R				R				R		
17	IP Post Base Unit	VXA4397	1				R				R				R				R		
18	Capstan Bearing	VDB1259	2				R				R				R				R		
19	Capstan Rotor Kit	VXP1489KIT	1				R				R				R				R		
—	Ring Roller	— — — —	—				C				C				C				C		
—	Brake Torque	— — — —	—				A				A				A				A		
20	S Brake Unit	VXL2119	1								R								R		
21	T Brake Unit	VXL2119	1								R								R		
22	S Brake Solenoid	VSJ0228	1								R								R		
23	T Brake Solenoid	VSJ0228	1								R								R		
24	Cleanner Solenoid	VSJ0218	1								R								R		
25	Loading Motor	VEM0323	1								R								R		
26	Front Loading Motor	VEM0393	1								R								R		
27	Sub Loading Motor	VEM0711	1								R								R		
28	Warm Motor	VEM0397	1								R								R		
29	Post Roller with Bearing	P1, P12	VXP1293	2							R								R		
30		P2	VXP0821	1							R								R		
31		P3	VXP1429	1							R								R		
32		P4	VXP0938	1							R								R		
33		P5, P6, P7	VXP0819	3							R								R		
34		P9, P10, P11	VXP0819	3							R								R		
35		P8	VXP1294	1															R		
36	Cam Gear	VDG0760	1								R								R		
37	Stopper Solenoid	VSJ0102	1								R								R		
38	Power Switch	K0AAKF000016	1																R		
39	Fan Motor	L6FALEGK0005	1	Replace after every 10,000h of operation time																	
40	Fan Motor (Power Unit side)	L6FAMEGK0005	1	Replace after every 10,000h of operation time																	

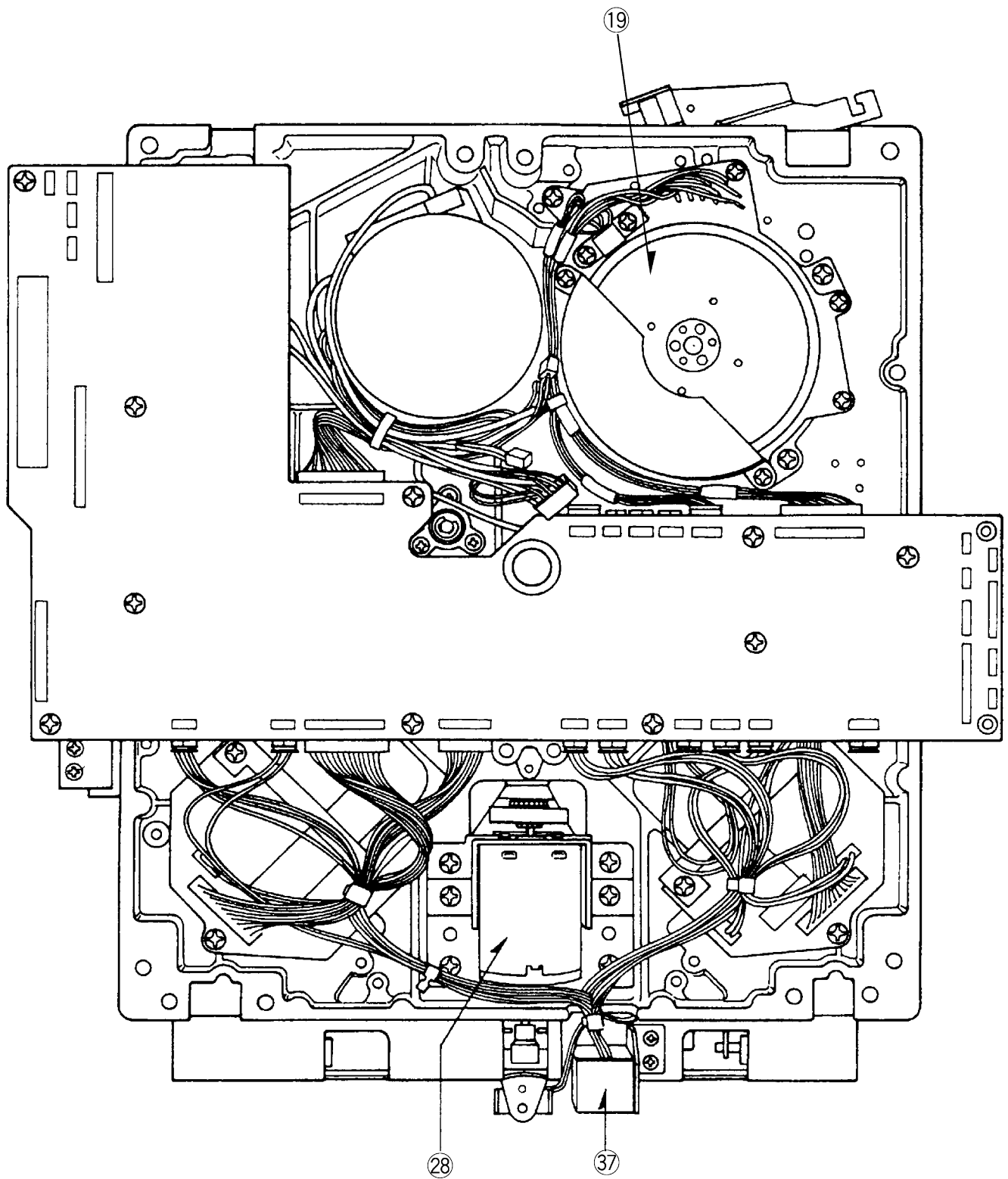
C: Cleaning, R: Replacement, G: Grease Up, A: Confirmation or Adjustment

4-2. Maintenance Parts Location

(Top View)



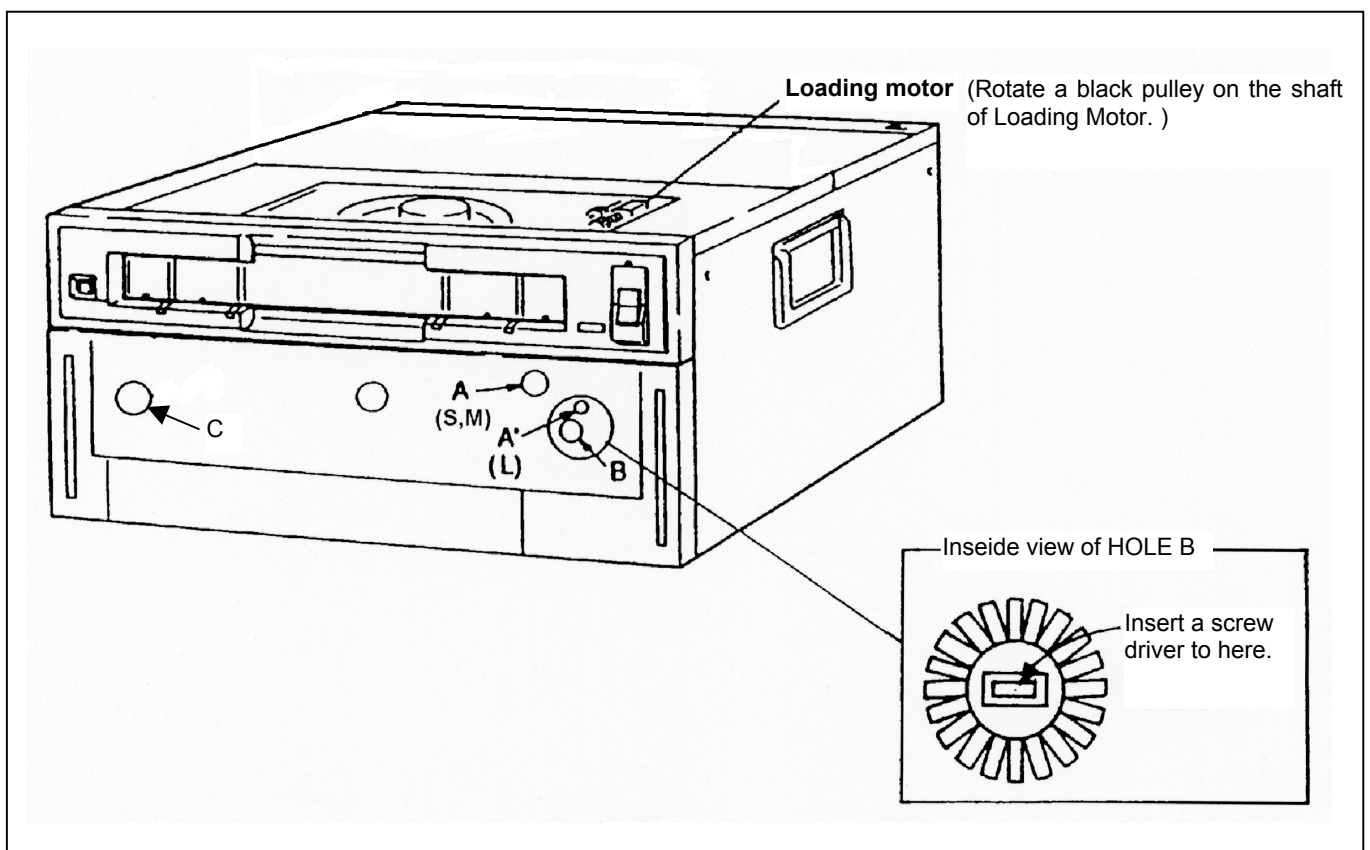
(Bottom View)



5. Manual Tape Eject Method

When a tape can not be ejected by some trouble, it can be removed manually as follows.

1. Turn power off and Remove the Top Panel.
2. Remove the Front Panel.
3. By rotating loading motor clockwise, threading mechanism can be moved to unloading direction. (There is a black pulley on the shaft of loading motor, refer to the following figure.)
However since, tape tension will be loosened in this operation, remove slack by winding tape following procedure item 4.
4. Insert a screw driver into hole A (for S and M cassettes) or A' (for L cassettes) and press the Take-up Reel Manual Drive Lever so that the core of S Brake Solenoid is pressed to wind up tape.
5. Repeat operation 3 and 4 until the tape comes off from the DRUM UNIT. (Rotate loading motor until the motor doesn't rotate. Then if you rotate further, it may cause broken gear.)
6. Insert a screw driver into hole B and gently rotate the pulley clockwise for manual sub-unloading. Then Insert a screw driver into hole A (for S and M cassettes) or A' (for L cassettes) and press the take-up reel manual drive lever to wind up the tape.
7. Confirm that the tape is completely wound up into the cassette.
8. Insert a screw driver into hole C and rotate counter-clockwise until the tape is ejected.



6. Cleaning Procedure

Following routine cleaning is recommended to maintain the functions and the performance of this device.

6-1. Cleaning Procedure Outline

Notes for cleaning:

The tape transport will be contaminated with magnetic powder and/or dust. It can be cause of deterioration of tape and/or video head. Therefore suitable cleaning is recommended as follows.

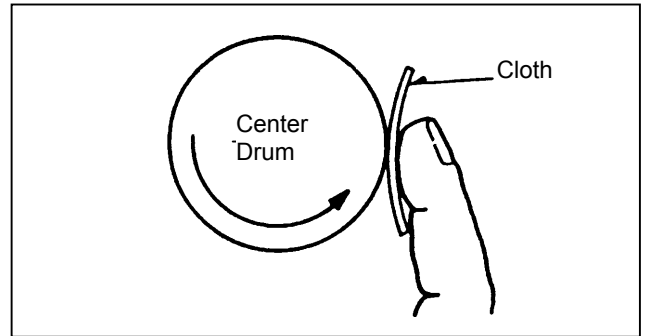
All procedures should be performed with AC power OFF.

- 1) Use cleaning fluid (medicinal alcohol, mechanical cleaner) for cleaning.
- 2) Use the cleaning fluid only on parts to be cleaned.
Especially for the cleaning post roller do not apply excessive cleaning fluid.
- 3) For cleaning, use proper cleaning cloth.
- 4) Perform cleaning in the following intervals.
 1. Video head cleaning:
Clean before use.
 2. Cleaning of the lower cylinder:
After routine cleaning.
 3. Cleaning of A/C head and full erase head:
After routine cleaning.
 4. Cleaning of pinch roller and capstan:
After routine cleaning.
 5. Post roller cleaning:
After routine cleaning.
 6. Reel table cleaning:
After routine cleaning.
 7. Cleaning with cleaning tape:
Every 100 hours or when the envelope level decreases.
 8. Cleaning inside of the VTR:
Every 6000 hours or every year.

6-2. Video Head Cleaning Method : (Daily)

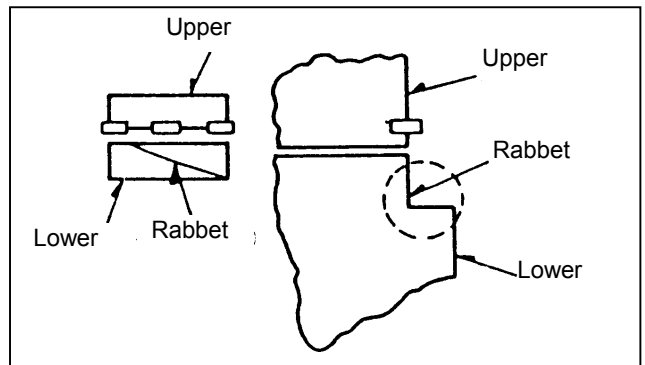
Clean heads with a cloth dipped in cleaning fluid by applying even pressure and rotating center drum counterclockwise a few times. Repeat this until all residue is removed from video head. After cleaning, wipe with a cleaning cloth.

Note: Never wipe the head in vertical direction, as the head may be damaged. Also don't leave lint etc. in the VTR.



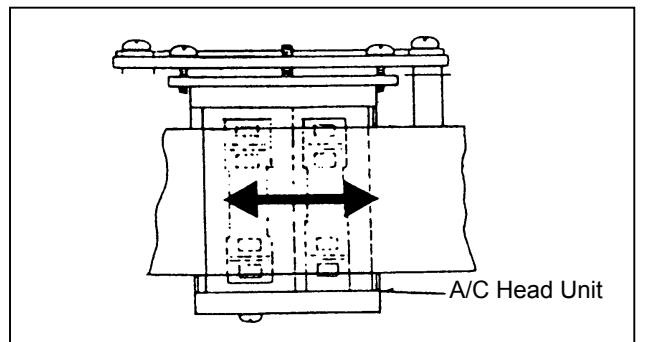
6-3. Lower Drum Cleaning Method : (Weekly)

Clean the rabbit guide with a shrapnel tooth pick. Clean the read and the surfaces with a cleaning cloth dipped in cleaning fluid. Afterwards, wipe with a dry cleaning cloth. Use an inspection mirror to check any scratches or signs of wear on the drum assembly.



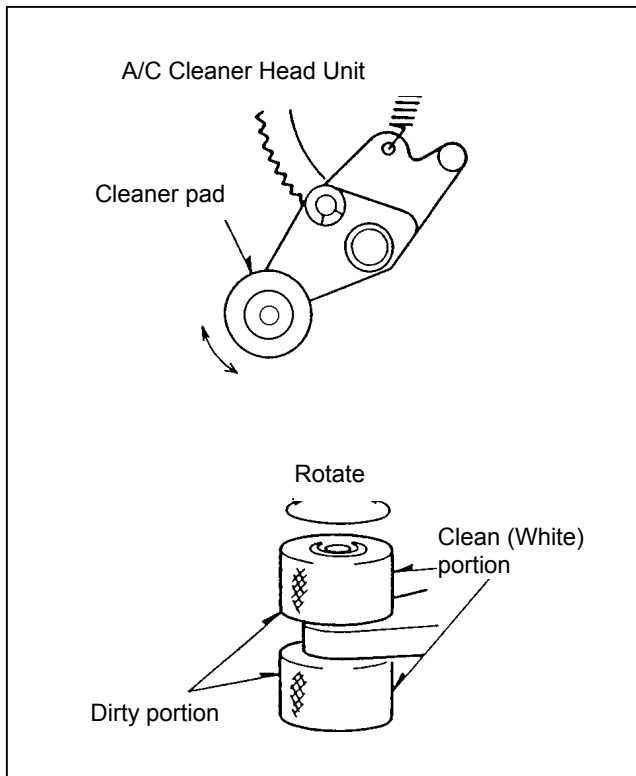
6-4. A/C Head and Full Erase Head Cleaning Method

Clean the A/C head and Full erase head with a cleaning cloth dipped in cleaning fluid then wipe with a dry cleaning cloth.



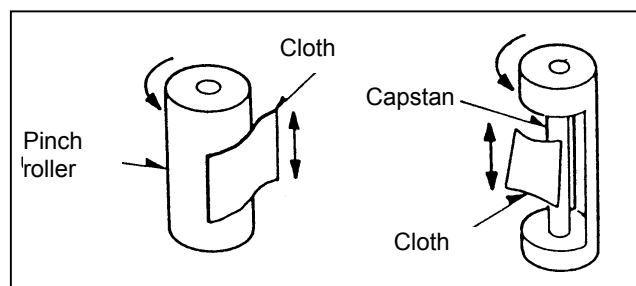
6-5. A/C Head Cleaner Pad Cleaning Method: (Weekly)

Rotate the cleaner pad so that the clean portion (white portion) can touch the A/C Head as shown in Figure below.



6-6. Pinch Roller and Capstan Post Roller Cleaning method: (Weekly)

The pinch roller should be cleaned with a cleaning cloth dipped in cleaning fluid. Rotate the roller and clean its entire surface up and down until the cleaning cloth does not show any residue. The capstan and pinch roller should be cleaned in the same manner.

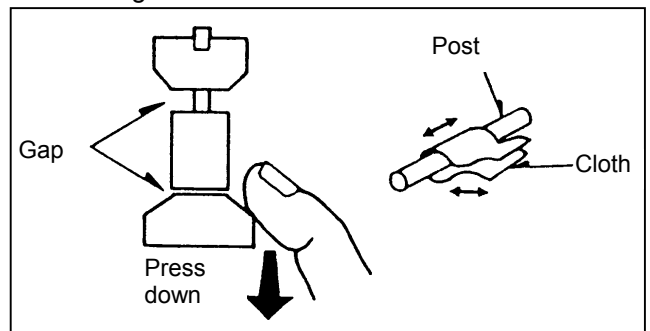


6-7. Tape Post Cleaning Method : (Weekly)

Wipe the surface of the tape posts (posts P1 to P12, inclined post) with cleaning cloth dipped in cleaning fluid. For the inclined post, wind the cleaning cloth in the same way as the tape wound and clean the entire post. For the posts P1 to P12, clean the post flange ends. The cleaning method is as described below.

Widen the gap between flange and roller by depressing the post flange with a finger and use a dry cleaning cloth to wipe off any dirt from the tape contact surface of the flange and the roller end surfaces. When releasing the lower flange, confirm that it returns to its original height.

Note: Don't apply excessive cleaning fluid onto post roller, so that no cleaning fluid will get into the roller. At the time of cleaning the post rollers P1 to P12, avoid holding the upper flange while cleaning, as this may cause loosening of the flange screw.

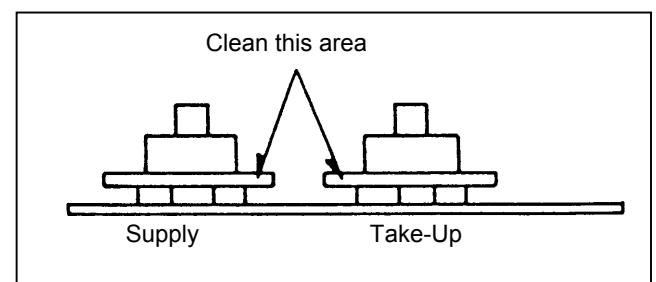


6-8. Reel Table Cleaning Method : (Monthly)

Clean the contact surfaces between the brake and the reel table with cleaning cloth dipped in cleaning fluid.

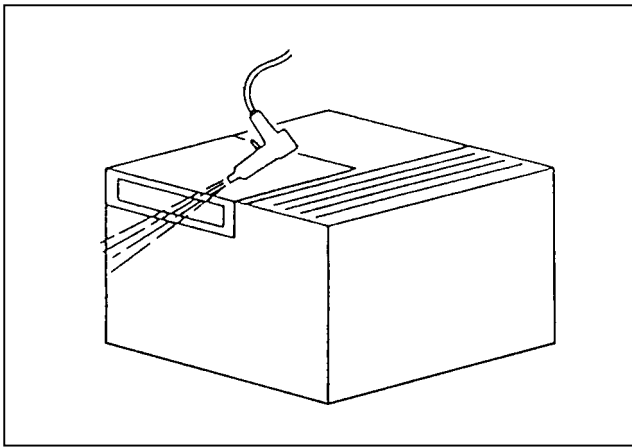
At the time of cleaning, rotate the reel table to clean the entire surface. Afterwards, wipe the reel table lightly with a dry cleaning cloth.

Wipe the reel seat attached to the top of the reel base lightly with a dry cleaning cloth.



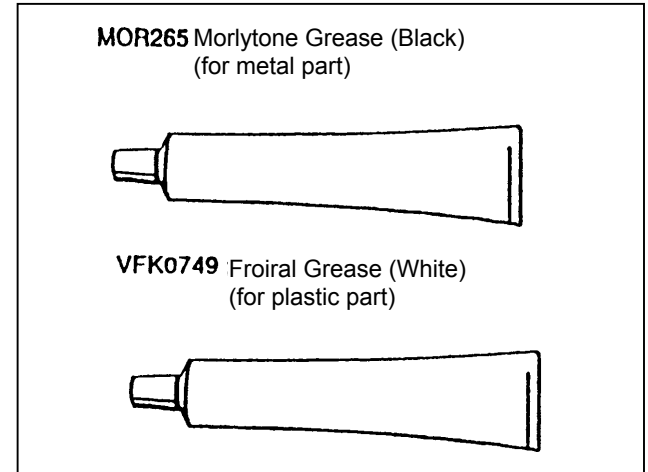
6-9. Cleaning inside of VTR (Sweeping dust)

- (1) Remove the front-loading unit and use an air gun to sweep dust from the mechanical unit. At this time, blow the air so that the dust will be blown out of the VTR. Also sweep any dust from the front-loading unit in the same way.
- (2) Use an air gun to remove dust that is in between the circuit boards. Also remove the bottom panel of the VTR to sweep dust from the motherboard, and remove the rear of the VTR to sweep dust around the fan motor in the same way.



6-10. Lubrication of the Gears and Sliding Surfaces

6-10-1. Types of grease



6-10-2. Grease up Method

1. Turn power off.
2. Remove the top pannel.
3. Remove the cassette compartment.
4. Confirm the mechanism is in unloading position.
5. Wipe off the old grease.
6. Apply a small amount of grease to the tip of a toothpick and apply grease to the required locations.

Note: As there are two types of grease, Morlytone and Froiral, use the correct type according to the location.

1. Turn on the power, insert a tape, and perform loading and unloading several times for fitting.
2. Move the mechanism to be in the loading completion position.
3. Rotate the subloading motor counterclockwise direction until subloading is completed.
4. With the loading ring drive gear in pushed-in condition, rotate the loading ring gear until loading completion condition is reached.
5. Move the mechanism to be in the unloading completion position. If excess grease is applied, remove it with a toothpick and/or cloth.

6-10-3. Greasing Locations

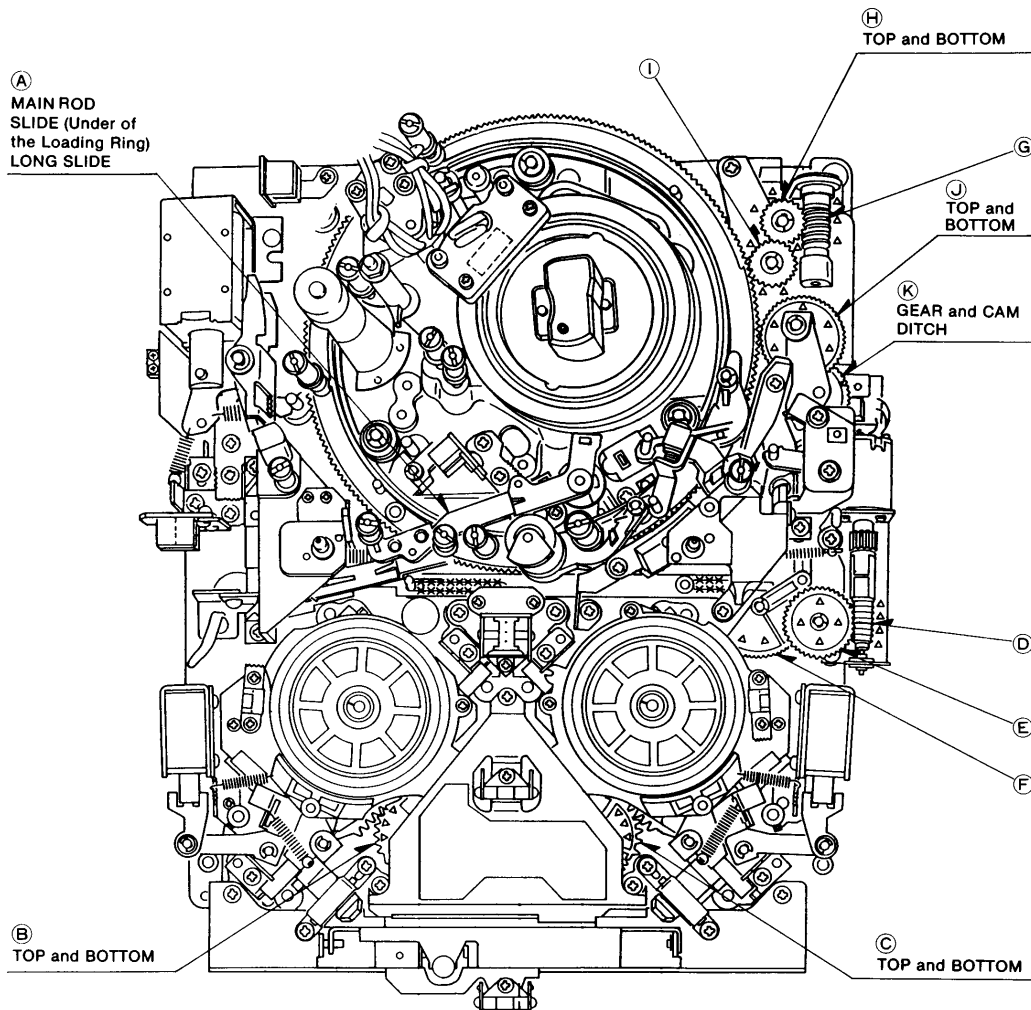
A. Mechanical Chassis

Apply grease at the following places on the mechanical chassis.

- [1] XXXXX Part : Molytone Grease (MOR265).
 - (A) Main Lod Ditch 3 portions
- [2] △△△ Part : Froiral Grease (VFK0749).
 - (B) Reel Base Drive Gear (Supply Side)
Reel Base Drive Wheel (Gear Part)
 - (C) Reel Base Drive Gear (Take-Up Side)
Reel Base Drive Wheel (Gear Part)
 - (D) Sub Loading Worm Gear
 - (E) Sub Loading Gear
 - (F) Sub Loading Drive Gear
 - (G) Main Loading Worm Gear
 - (H) Main Loading Connection Gear
 - (I) Loading Ring Drive Gear
 - (J) Loading Ring Connection Gear
 - (K) Loading Ring Connection CAM Gear

XXX : Molytone Grease (MOR265)

△△△: Froiral Grease (VFK0749).



B. Cassette Compartment

Apply grease at the following places on the cassette compartment.

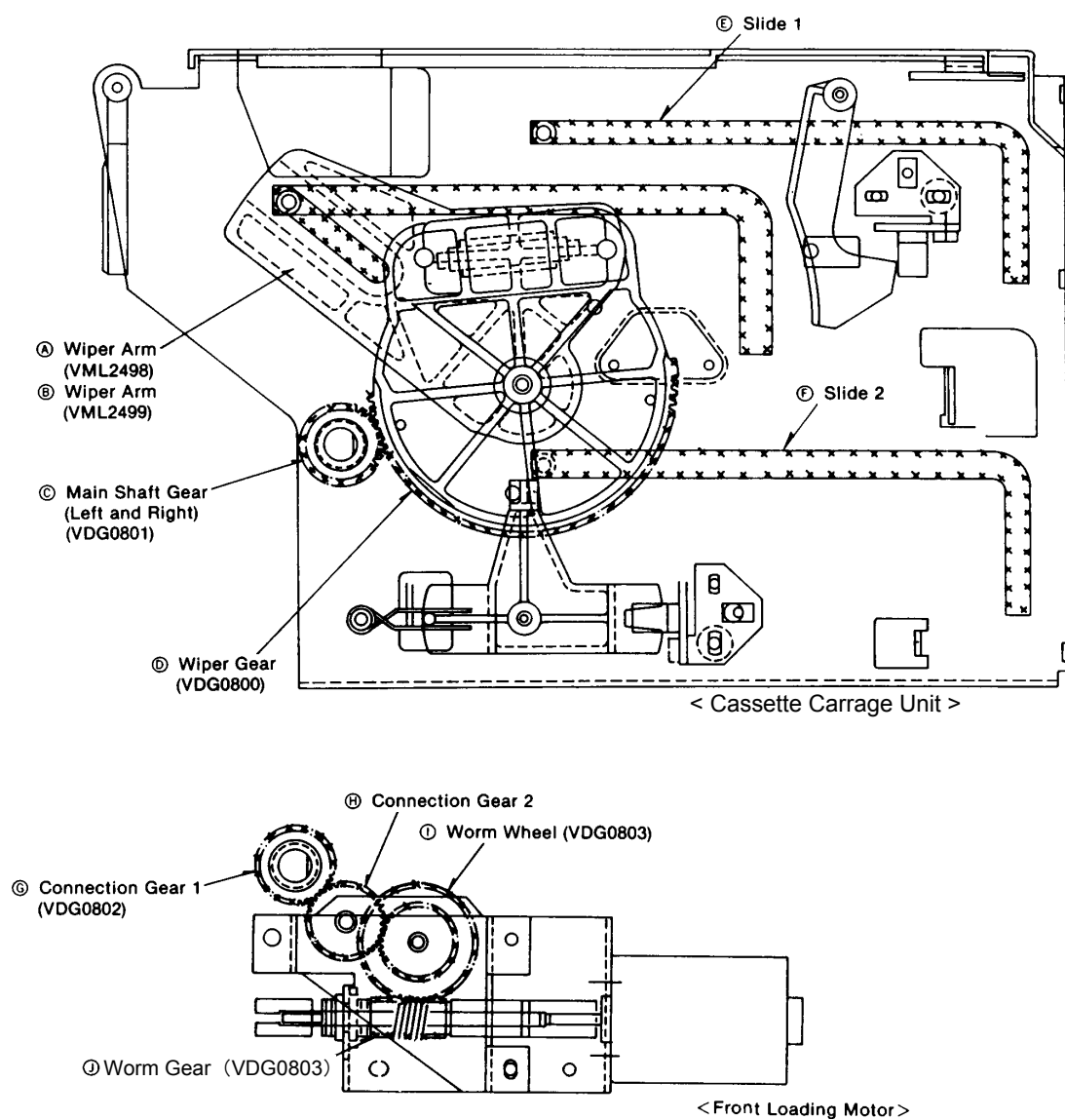
Apply only Froiral grease (VFK0749) for the cassette compartment.

< Cassette compartment Unit >

- (A) Wiper Arm (Right)
- (B) Wiper Arm (Left)
- (C) Main shaft Gear (Right and Left)
- (D) Wiper Gear
- (E) Slide 1
- (F) Slide 2

< Front Loading Motor >

- (G) Connection Gear 1
- (H) Connection Gear 2
- (I) Worm Wheel
- (J) Worm Gear



7. ERROR RATE DISPLAY & CONFIRMATION

The error rate can be confirmed on TEST RF menu. TEST RF menu is opened by pressing **TEST** → **F2** (RF) key.

7-1. Error Rate Display procedure

There are 2 error rate displays, TOTAL ERROR and INNER ERROR.

(1) TOTAL ERROR

During recording, the error rate of the confidence playback signals is displayed.

During playback, the error rate of the playback signals is displayed.

The audio channel selection of total error rate is as follows.

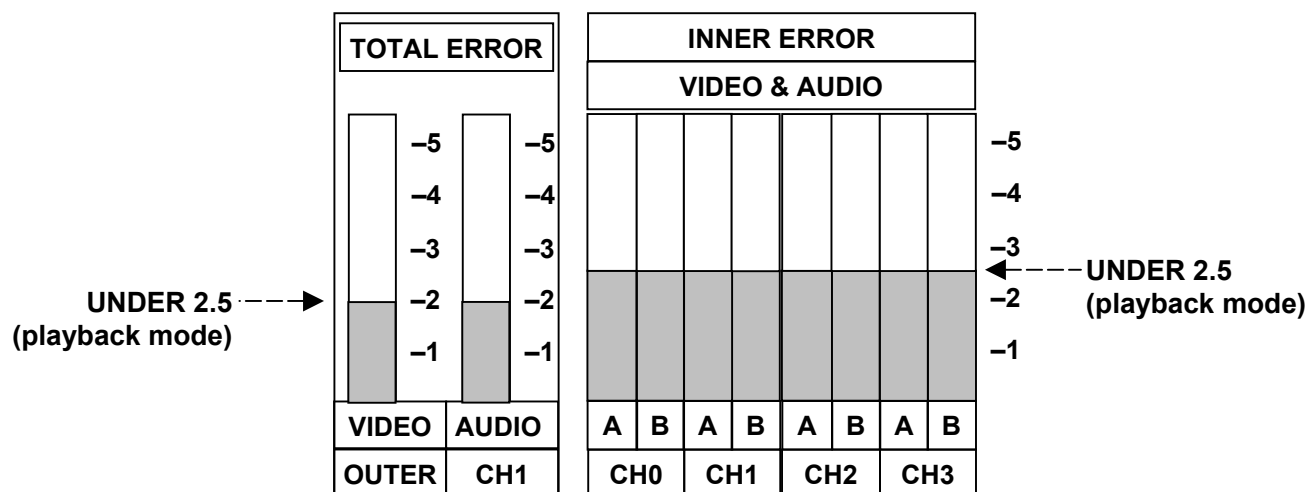
- ① Press the cursor center key to display the cursor.
- ② Press the **F** key and cursor key (**→** or **←**) simultaneously to move the cursor to channel display of TOTAL ERROR.
- ③ Press the cursor center key to select the number of audio channel.
- ④ Press the ENT key to enter the setting.

(2) INNER ERROR

The error rate after the inner errors are corrected is displayed for 8 heads. The error rate prior to correction will be displayed, when the inner error rate correction to OFF.

Selection between “VIDEO & AUDIO” and “AUDIO” process is as follows.

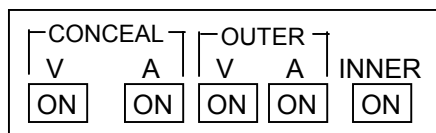
- ① Press the cursor center key to display the cursor.
- ② Press the **F** key and cursor key (**→** or **←**) simultaneously to move the cursor to INNER ERROR.
- ③ Press the cursor center key to select 「AUDIO & VIDEO」 or 「AUDIO」.
- ④ Press the ENT key to enter the setting.



7-2. Error Rate Confirmation Procedure

Use color bar alignment tape and blank tape to confirm the error rate. Then set the SYSTEM on the menu following the format of color bar alignment tape.

1. Set the Service switch (bit 1 of DIP SW 1 on front bottom side) to ON position to be in the Service mode.
2. The INNER and OUTER error correction ON or OFF can be set on TEST RF menu.



Error correction ON or OFF setting is as follows.

- ① Press the cursor center key to display the cursor.
 - ② Press the **[F]** key and cursor key (**[→]** or **[←]**) simultaneously to move the cursor to the display of OUTER or INNER correction setting.
 - ③ Press the cursor center key to select ON or OFF.
 - ④ Set the VIDEO OUTER, AUDIO OUTER and INNER correction to OFF.
 - ⑤ Press the ENT key to enter the setting.
3. Under the condition that VIDEO OUTER, AUDIO OUTER and INNER correction are OFF, confirm that the error rate is in the specification as indicated in the following table

	Master Playback	Confidence Playback	Self Recorded Playback
TOTAL ERROR	Under —5.0 (under 2)	Under —4.5 (under 2.5)	Under —5.0 (under 2)
INNER ERROR	Under —4.5 (under 2.5)	Under —4.0 (under 3)	Under —4.5 (under 2.5)

The numerical values in parenthesis indicate scale on display.

The error rate should be confirmed to 4 format, 59I 4ch, 59I 8ch, 23p and 50I mode.

8. INTERNAL SWITCH SETTING

The switch settings on each circuit board are shown below.

The switches "Factory use only" must be set to the "Factory setting".

8-1. SW6501 on M1 Board.

BOARD	Ref. No.	SW	FACTORY SETTING	FEATURE	ON	OFF
SYS/SRV (M1)	SW6501	1	ON(FIXED)	Set the read timing of SDRAM on REC SUB P.C.B.	More than 5ns	Less than 5ns
		2	OFF(FIXED)	Factory use only	—	—
		3	OFF(FIXED)	Not Used	—	—
		4	OFF(FIXED)	Not Used	—	—
		5	OFF(FIXED)	Not Used	—	—
		6	OFF(FIXED)	Not Used	—	—
		7	OFF(FIXED)	Not Used	—	—
		8	OFF(FIXED)	Factory use only	—	—

8-2. SW6071 on M1 Board.

BOARD	Ref. No.	SW	FACTORY SETTING	OFF
SYS/SRV (M1)	SW6071	1	ON(FIXED)	MODEL setting, HD3700: ON
		2-5	OFF(FIXED)	FACTORY USE ONLY
		6	ON or OFF	Set to D3 cassette enable or not
			* see below	
		7-8	OFF(FIXED)	FACTORY USE ONLY

Setting of SW6071-6

D3 cassette can be inserted by setting of SW6071-6. But it's setting is different by the syscon software version as follows.

In case the SYSCON software version is before 0.07L.

ON: D3 enable

OFF: D3 disenable

In case the SYSCON software version is 0.07L or higher.

ON: D3 disenable

OFF: D3 enable

The SW6071-6 is set to be able to insert D3 cassette as factory default setting.

8-3. SW2001 on M1 Board.

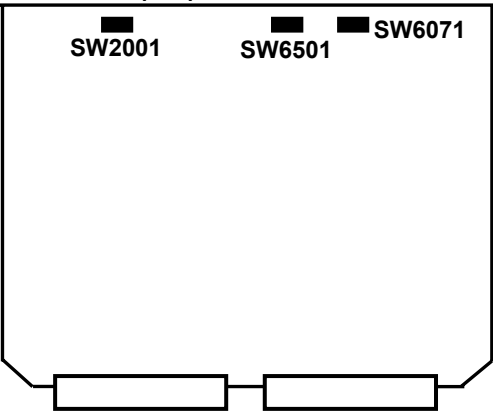
BOARD	Ref. No.	SW	FACTORY SETTING	FEATURE	ON	OFF
SYS/SRV (M1)	SW2001	1	OFF(FIXED)	SEARCH	CENTER	ENABLE
		2	OFF(FIXED)	PATTERN	FIX	ENABLE
		3	OFF(FIXED)	STRN LOOP	OPEN	CLOSE
		4	OFF(FIXED)	HIGH VOLTAGE	OFF	ON

8-4. Other Switches.

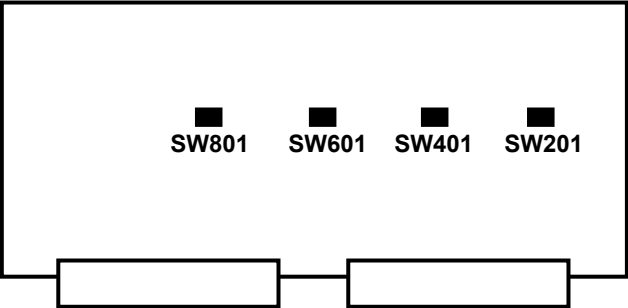
BOARD	Ref. No.	SW	FACTORY SETTING	FEATURE
EQ	SW201	1-2	OFF (FIXED)	FACTORY USE ONLY
	SW401	1-2	OFF (FIXED)	FACTORY USE ONLY
	SW601	1-2	OFF (FIXED)	FACTORY USE ONLY
	SW801	1-2	OFF (FIXED)	FACTORY USE ONLY
REC AMP	SW101	1-2	OFF (FIXED)	FACTORY USE ONLY
FRONT CNTL2	SW1	1	OFF (FIXED)	NORMAL/SERVICE MODE select
		2	OFF (FIXED)	FACTORY USE ONLY
		3	OFF (FIXED)	FACTORY USE ONLY
		4	OFF (FIXED)	FACTORY USE ONLY

8-5. Switch Location.

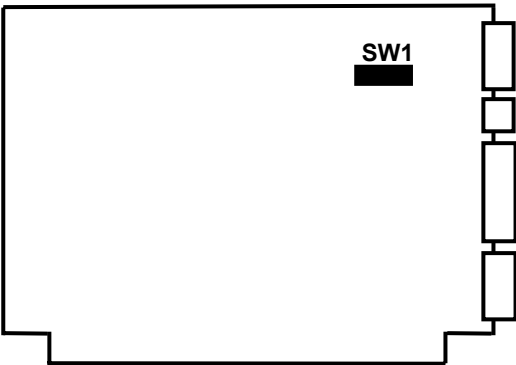
SYS/SRV (M1) circuit board



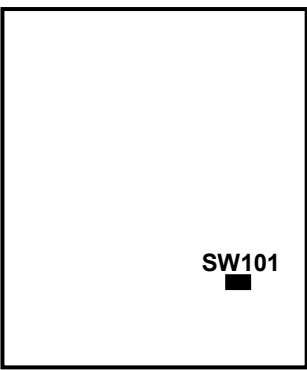
EQ(S1) circuit board



FRONT CONTROL 2 circuit board



REC AMP circuit board

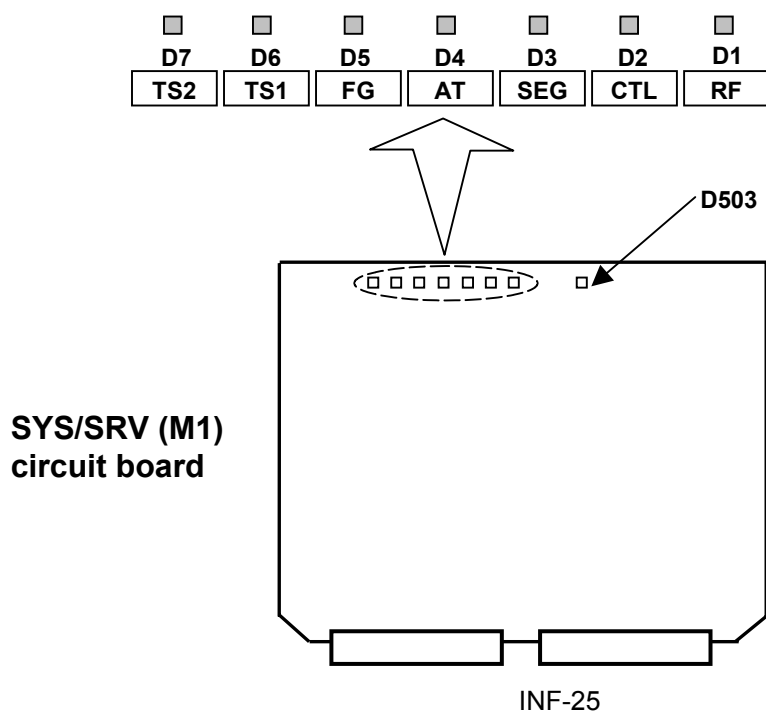


9. INTERNAL LED INDICATION

Function of LED on M1 P.C.Board are described below.

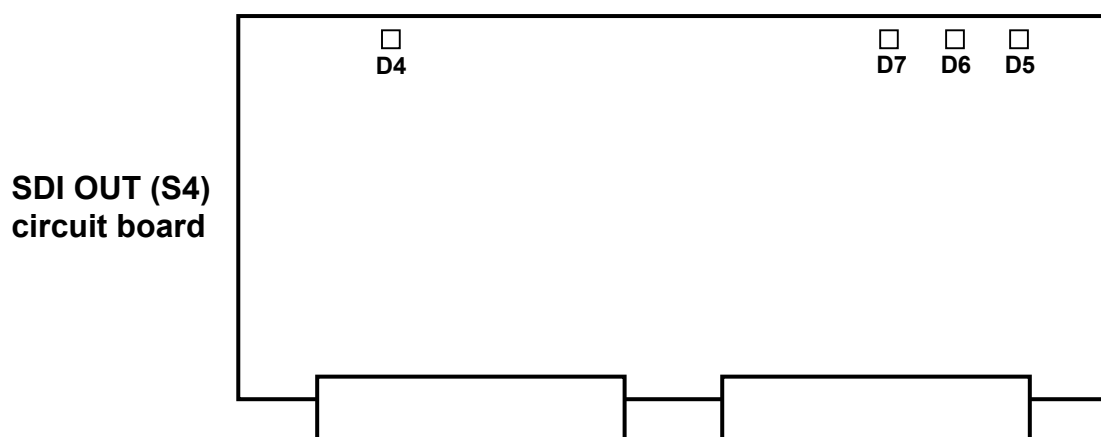
9-1. LED on M1 board.

BOARD	Ref. No.	NAME	FUNCTION
SYS/SRV (M1)	D1	RF	LED flashes brightly, when SEARCH is set to CENTER by TEST SERVO menu or DIP SW 2000 on M1 circuit board. LED is ON, when RF signal becomes less than 50% on VAR mode or head clog occurred on except VAR mode. LED flashes lightly, AT function stops or at the SEARCH mode. LED is OFF when RF signal condition is normal. NOTE: The VTR detect LOW RF condition when the VTR isn't in tape loosing condition at loading complete condition.
	D2	CTL	LED is ON, when CTL signal is chipped off or VTR can not detect TAPE FORMAT or CTL duty in capstan drive mode.. LED is OFF, when CTL signal is detect normally. LED flashes brightly 1 second cycle, when the tape format is unmatched to VTR setting LED flashes lightly 2 second cycle, when the VTR can not detect CTL signal.
	D3	SEG	LED is ON, when the SEGMENT is shifted in both channel A and B under the AT mode. LED flashes, when the SEGMENT is shifted in either of channel A or B under the AT mode. LED is OFF, when the SEGMENT is matched in both channel A and B under the AT mode.
	D4	AT	NOT USED (LED is always ON)
	D5	FG	LED is ON, when the CYL FG and PG signals are not detected while Cylinder is rotating.
	D6	TS1	NOT used (LED is always ON)
	D7	TS2	NOT used (LED is always ON)
	D503	—	To confirm AV micon operation. If it work correctly LED flashes. In case AV micon does not work correctly, LED is OFF and message "AV NOT RESPOND" appears on display.



9-2. LED on S4 board.

BOARD	Ref. No.	NAME	FUNCTION
SDI OUT (S4)	D4	PIO	Not used but LED is ON lightly.
	D5	P2S1LOCK	When the clock and data is inputed to IC91 and it works correctly, LED is ON. (LED is OFF, when the SD SDI output signal is stopped.)
	D6	P2S2LOCK	When the clock and data is inputed to IC92 and it works correctly, LED is ON. (LED is OFF, when the SD SDI output signal is stopped.)
	D7	P2S3LOCK	When the clock and data is inputed to IC93 and it works correctly, LED is ON. (LED is OFF, when the SD SDI output signal is stopped.)



10. SOFTWARE VERSION, PLD SOFTWARE VERSION, & HOUR METER CONFIRMATION PROCEDURE

When the **TEST** key is pressed, software version, hour meter information and serial number of VTR can be confirmed on Display Panel.

10-1. Hour Meter Display

OPERATION TIME			
OPERATION	:	105 HOURS	HEAD ROTATION : 22 HOURS
TAPE TRAVEL	:	15 HOURS	THREADING : 90 TIMES

Details of hour meter display are given below

Item	Display Data	Description
OPERATION	00000H~99999H	The hours how long power has been on.
DRUM RUN	00000H~99999H	The hours how long cylinder has been rotating.
TAPE RUN	00000H~99999H	The hours time how long the tape transport has worked in the fast forward, rewind, play, search (JOG, VAR, SHTL), recording or editing mode (but not in the STILL mode with JOG, VAR, SHTL).
THREADING	00000T~99999T	The number how many times the tape threading and unthreading has been done.

10-2. Software Version Display

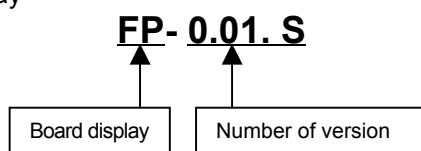
Software version is displayed on the Front Display Panel as indicated below.

FRONT: Front Software
AV: AV Software

SYSCON: SYSCON Software
SERVO: SERVO Software

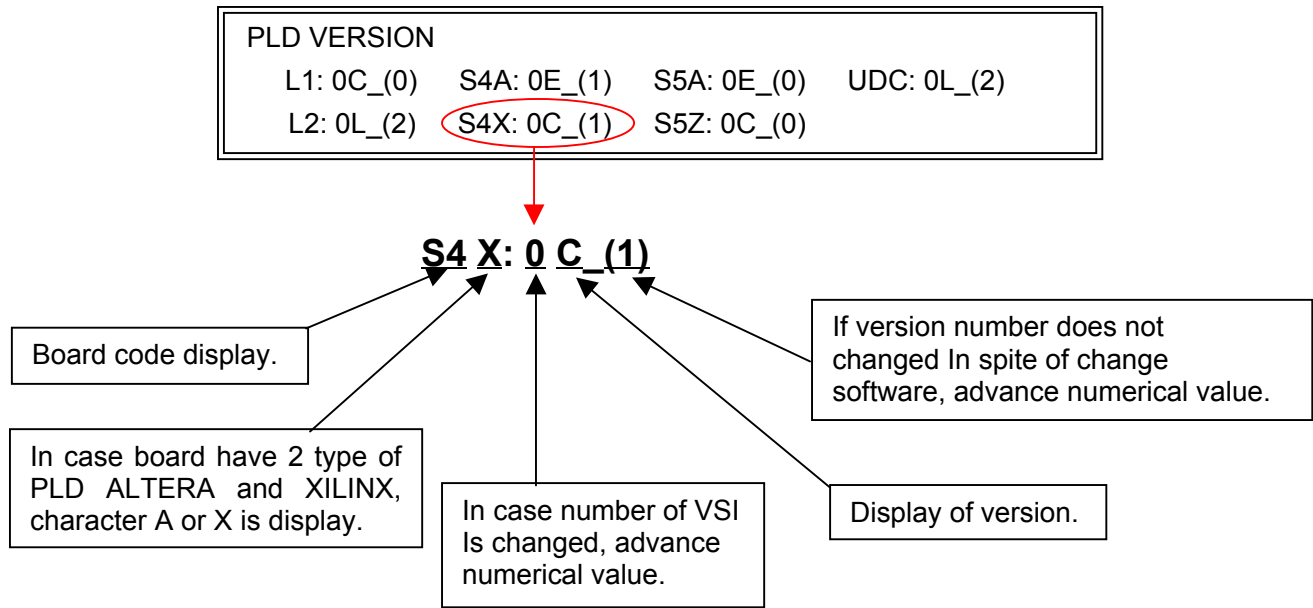
SOFTWARE VERSION			
FRONT	:	FP-0.01. S	AV : M1-0.03. B
SYSCON	:	M1-0.02. C	SERVO : M1-0.01. A

<How to confirm the version display>



10-3. PLD Version Display

PLD software version is displayed on the Front Display Panel as indicated below



11. SOFTWARE VERSION UPGRADE METHOD

11-1. For Software Version Upgrade.

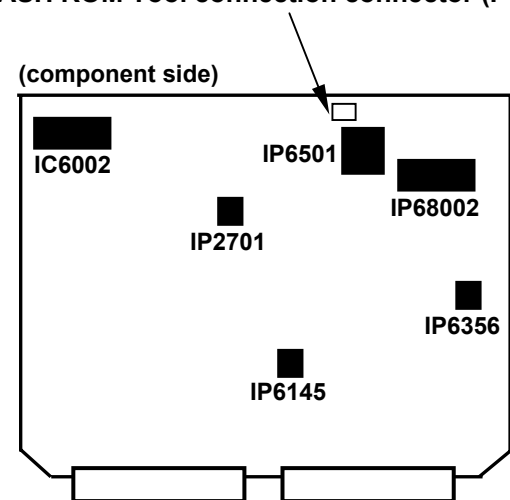
Some software of AJ-HD3700H can be upgrade in the market. There are some kinds of software, such as EPROM, FLASH MEMORY, CPLD and FPGA. Please refer to following table to see which board has FLASH MEMORY and EPROM.

<EPROM & FLASH MEMORY>

BOARD	NAME	TYPE	Ref No.	LOCATION
SYS/SRV/AV (M1)	SYSCON	EPROM	IC68002	H – 2
	SERVO	EPROM	IC6002	B – 1
	AV	FLASH Memory	IP6501	F – 2
FRONT CONTROL 2	FRONT	EPROM	IC8	B – 4
		EPROM	IC9	B – 3
SDI IN (S5)	—	EPROM	IC143	E – 2

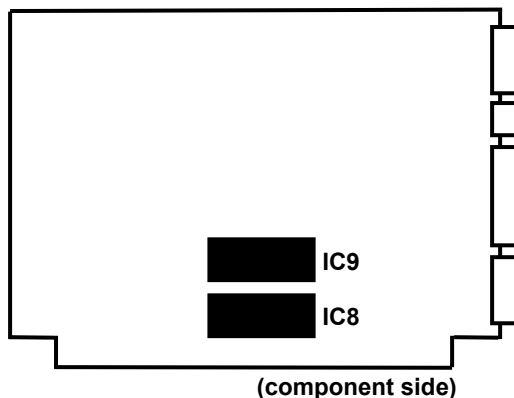
The EPROM is inserted to IC socket on M1, S5 and FRONT CONTROL 2 Board. The EPROM can be upgrade by ROM Writer. Please rewrite new software into EPROM or replace it to new EPROM for version upgrade. The Flash Memory (Bulit-in Microcomputer with Flash Memory) on M1 board can be upgraded by version up software. Upgrade procedure is mentioned in this section.

FLASH ROM Tool connection connector (P6501)

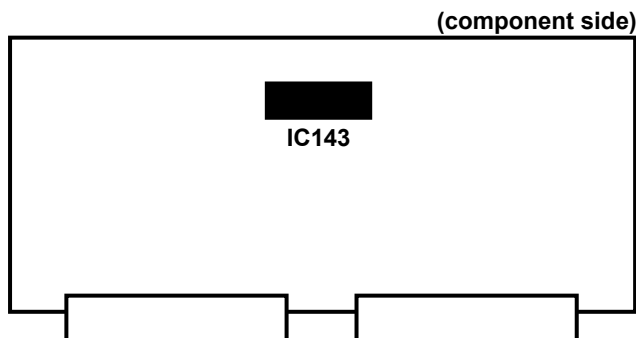


SYS/SRV (M1) circuit board

FRONT CONTROL 2 circuit board



(component side)

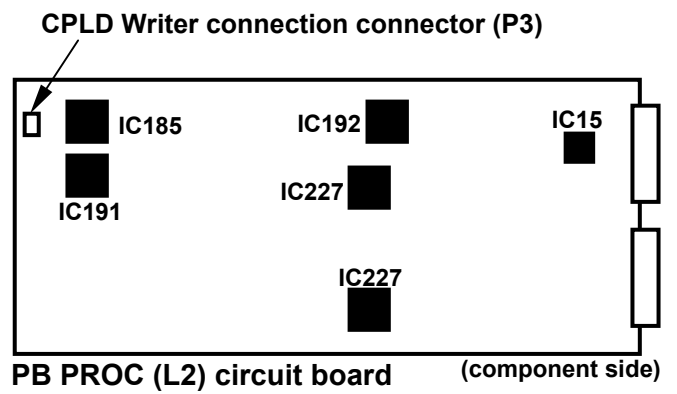
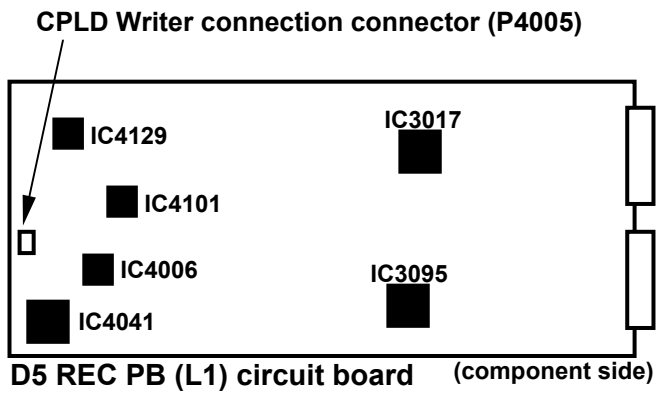


SYS/SRV (M1) circuit board

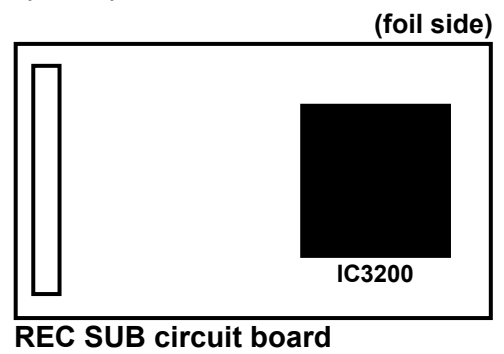
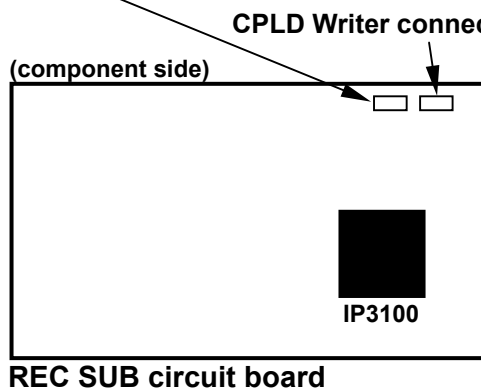
The AJ-HD3700H uses CPLD and FPGA as indicated in the following chart, which can be upgraded with the CPLD Writer and CPLD writing software. Following chart shows reference number of connectors and CPLD manufactures. Connect the CPLD Writer to respective connector on board and run the CPLD writing software. Upgrade procedure is common to CPLD and FPGA. Upgrade procedure is mentioned in this section.

[CPLD & FPGA]

BOARD	Manufacture	Type	Quantity	PLD writer Connection Connector	Number of Pins	Ref No.
D5 REC PB (L1)	ALTERA	CPLD	6	P4005	8P	IC3017
						IC3095
						IC4006
						IC4041
						IC4101
						IC4129
REC SUB	XILINX	CPLD	1	P3101	8P	IP3100
		FPGA	1	P3100	8P	IC3200
PB SUB	XILINX	CPLD	1	P3101	8P	IP3100
		FPGA	2	P3100	8P	IC3200
						IC3600
PCM PB SUB	ALTERA	CPLD	1	P4003	8P	IC4018
PB PROC (L2)	ALTERA	CPLD	6	P3	8P	IC15
						IC51
						IC185
						IC191
						IC192
						IC227
CUE/TC (S2)	ALTERA	CPLD	1	P4801	8P	IC4801
A ADDA (S3)	ALTERA	CPLD	1	P4801	8P	IC4801
SDI OUT (S4)	ALTERA	CPLD	2	P3	8P	IC53
						IC86
	XILINX	CPLD	2	P4	8P	IC24
						IC29
SDI IN (S5)	ALTERA	CPLD	1	P6	8P	IC77
	XILINX	CPLD	3	P3	8P	IC18
						IC75
						IC109
RATE CON	ALTERA	CPLD	2	P2	8P	IC13
						IC18
META SUB	ALTERA	CPLD	1	P1	8P	IC6
SYS/SRV (M1)	XILINX	CPLD	3	P6141	8P	IP6145
						IP6356
						IP2701
UP/DOWN CONV.	ALTERA	CPLD	2	P700	8P	IC304
						IC608

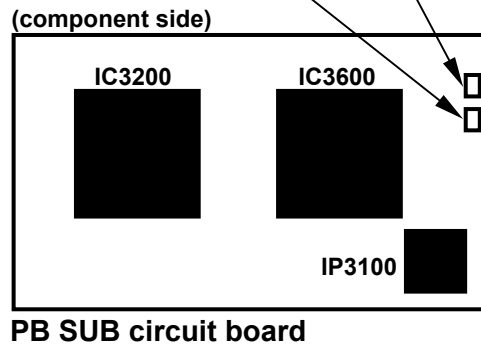


CPLD Writer connection connector (P3100)

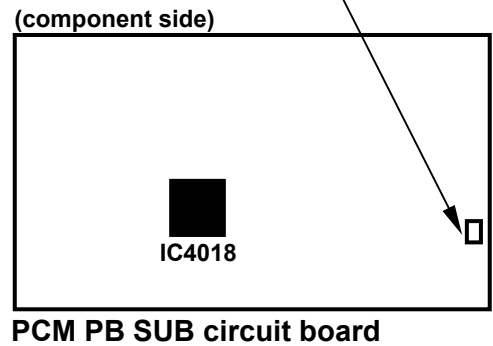


CPLD Writer connection connector (P3100)

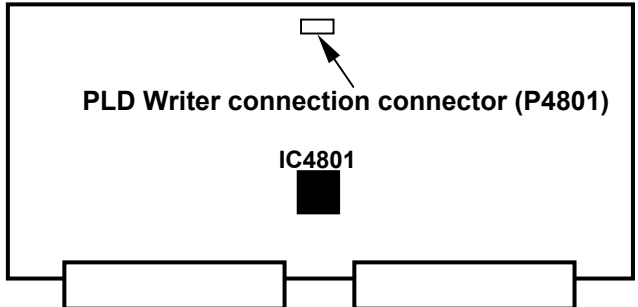
CPLD Writer connection connector (P3101)



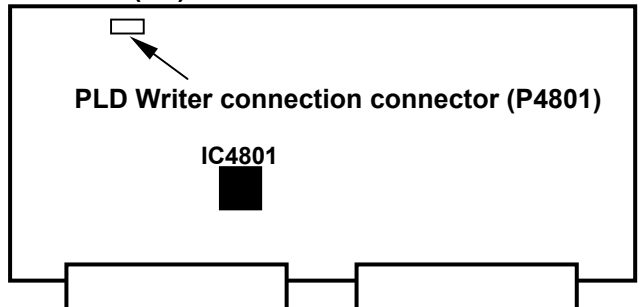
CPLD Writer connection connector (P4003)



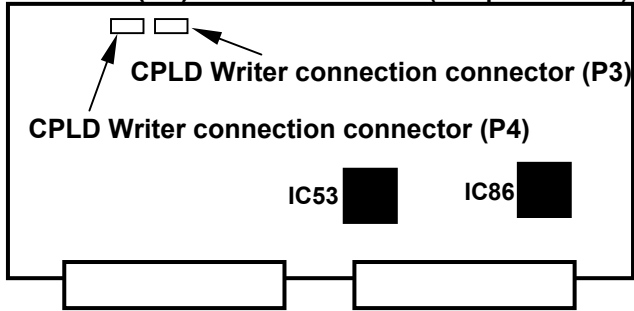
A ADDA (S3) circuit board (component side)



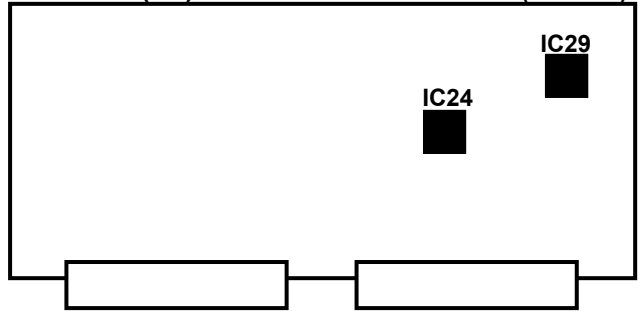
CUE/TC (S2) circuit board (component side)



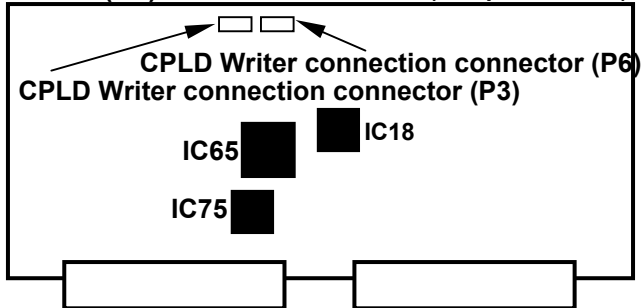
SDI OUT (S4) circuit board (component side)



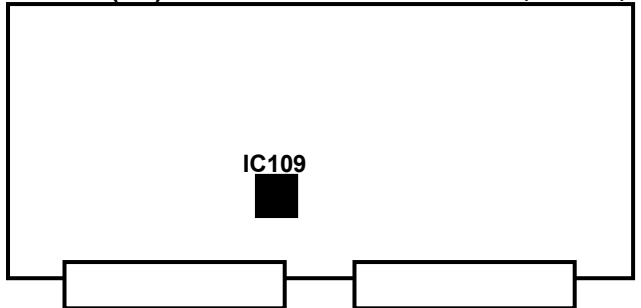
SDI OUT (S4) circuit board (foil side)



SDI IN (S5) circuit board (component side)

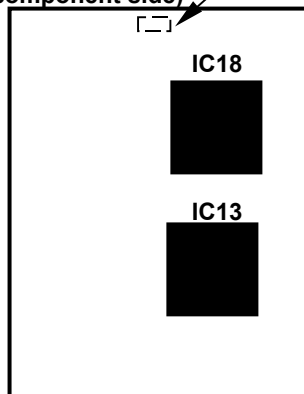


SDI IN (S5) circuit board (foil side)



CPLD Writer connection connector (P2)

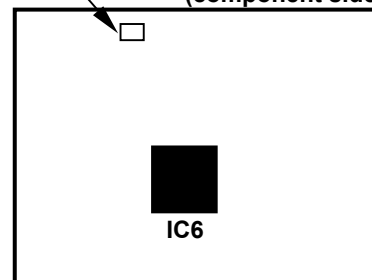
(component side)



RATE CONV. circuit board

CPLD Writer connection connector (P1)

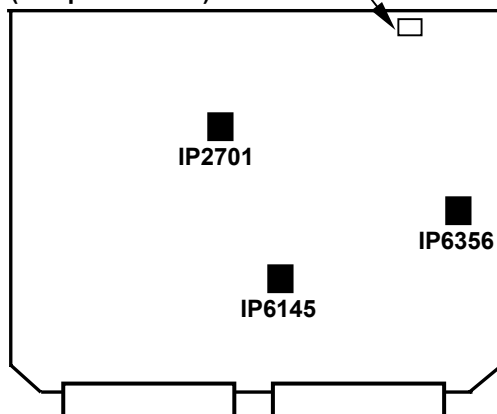
(component side)



META SUB circuit board

CPLD Writer connection connector (P6141)

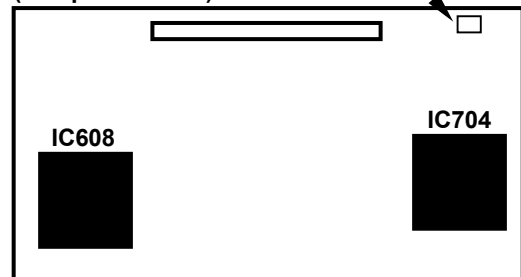
(component side)



SYS/SRV (M1) circuit board

CPLD Writer connection connector (P700)

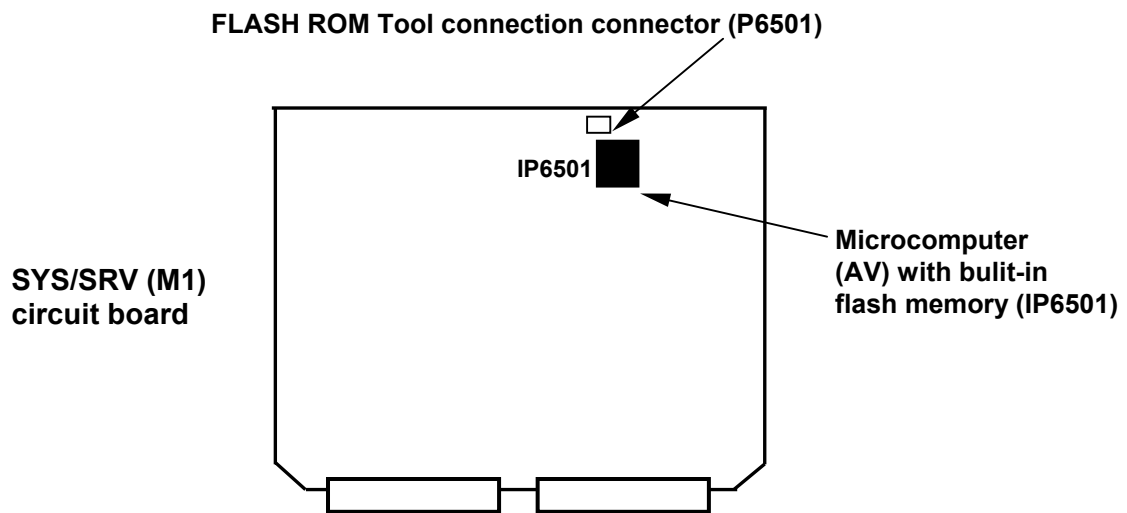
(component side)



UP/DOWN CONV. circuit board

11-2. Version Upgrade Procedure of A/V Microprocessor

The microcomputers(AV) on the **SYS/SRV (M1)** circuit board has built-in flash memory. For the AV software version up, connect the “**Flash memory version up tool(VFK1304A)**” to the tool connection connector and use the “**Flash memory version up software(VFK1248J)**” according to the following procedure.



11-2-1. Preparations

1. Items required for flash memory writing

Flash memory version up software **VFK1248J**

NOTE: The old version software (VFK1248E) can not be used.

Flash memory version up tool **VFK1304A**

Personal computer compatible with Windows 95/98

RS-232C cable (9-pin cross cable)

2. Installation of the flash memory version up software

Copy the following file to any directory on a personal computer compatible with Windows 95/98.

(After execution of the software, an “INI” file will be created in the same directory as the program file, but this may be left or may be deleted as desired.)

Program file **VSI2312J.EXE**

3. Setting of the flash memory version up tool

Confirm the switch setting of the “flash memory version up tool(VFK1304A)”

SW1-1: ON

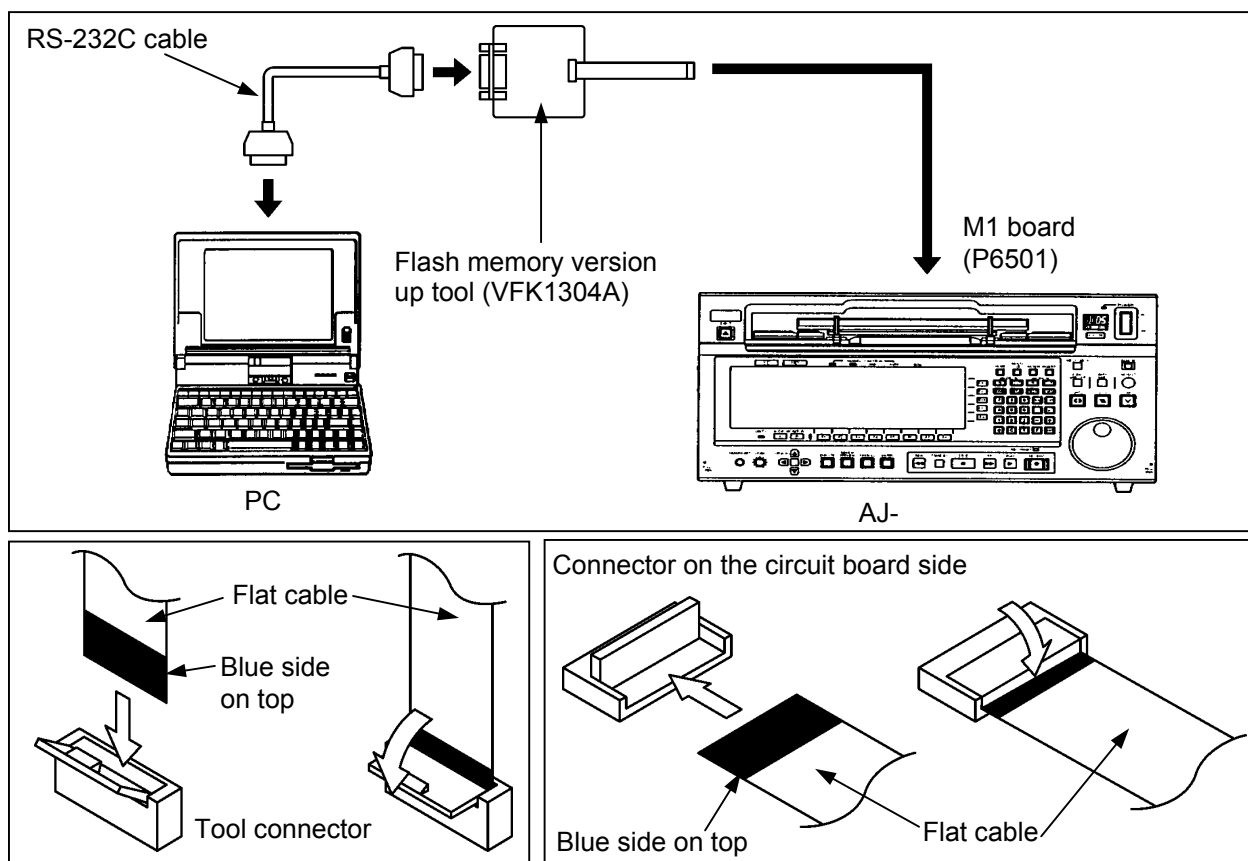
SW1-3: OFF

SW1-2: ON

SW1-4: OFF

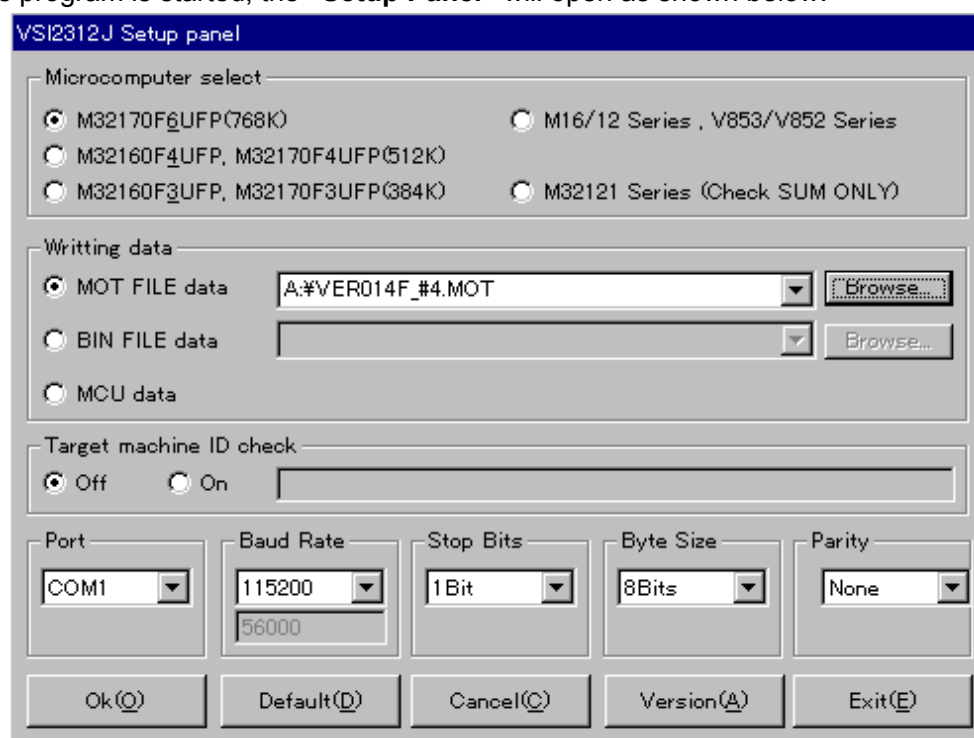
4. Connection of the flash memory version up tool

Turn off the power of the AJ-HD3700H and the personal computer and then connect them as shown in the following figure. Do not confuse the connection direction(top, bottom) for the flat cable of the flash memory version up tool(VFK1304A).

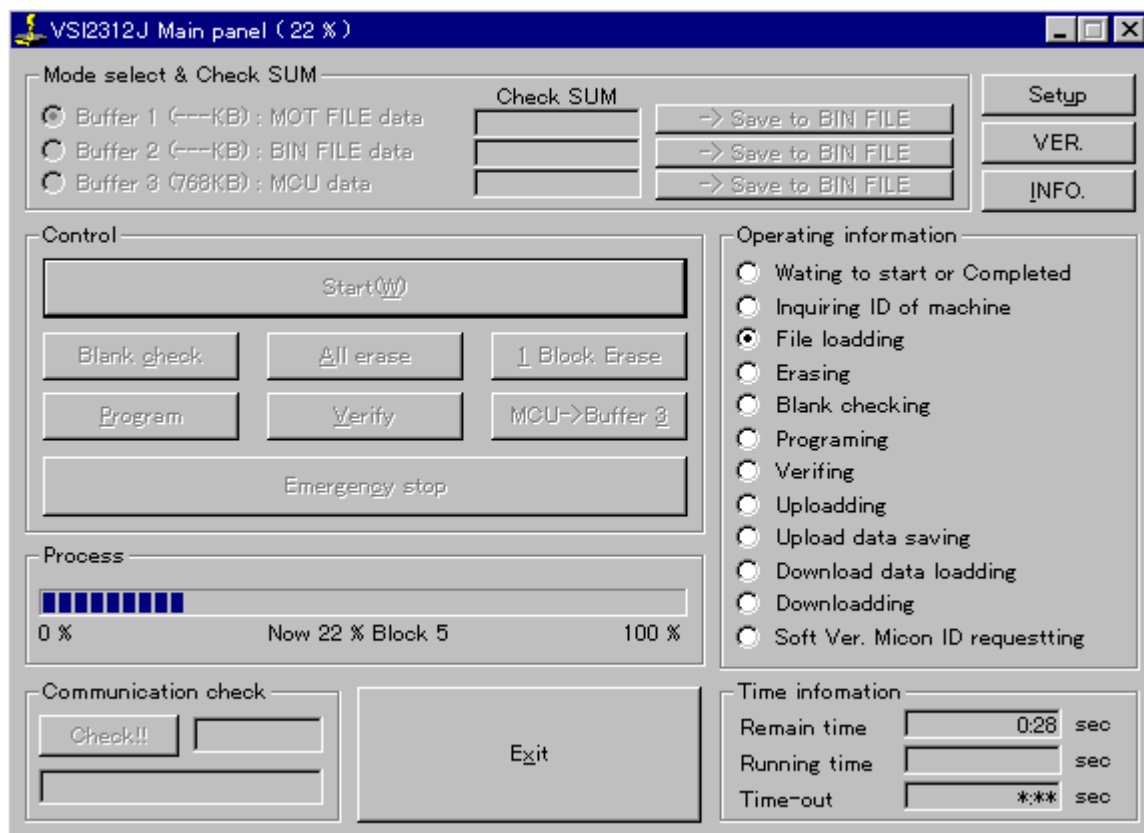


11-2-2. Version Upgrade Procedure

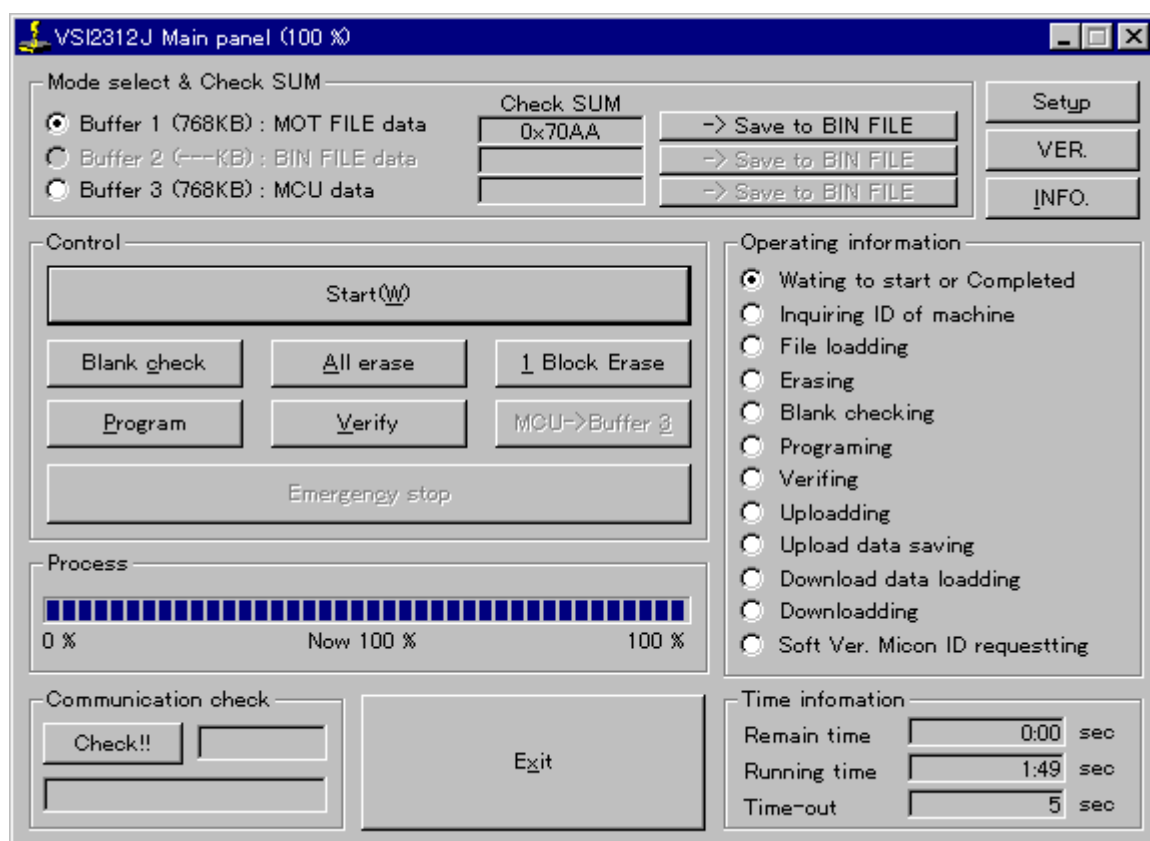
1. Boot up the personal computer in the condition that “11-2-1. Version Upgrade Preparations” is completed.
2. Turn on the power of AJ-HD3700H.
3. Boot up the flash memory version up software.
(Double-click the program file “**VSI2312J.EXE**”, which had been copied to arbitrary directory, or create a shortcut to “**VSI2312J.EXE**” and double-click the shortcut.
4. When this program is started, the “**Setup Panel**” will open as shown below.



5. Perform the following settings on the **“Setup Panel”**.
 - Microcomputer select **M32170F6UFP**
 - Writing data **File data**
 Enter the new software (**XXXX.mot**) for the version upgrade with the full path. You can also use the **“Browse...”** button on the **“Setup Panel”** to select the file name and the location of the new software.
 - Port Set the port which the RS-232C cable of the personal computer is connected to.
 - Baud Rate **56000**
 - Stop Bits **1Bit**
 - Byte Size **8Bits**
 - Parity **None**
6. When the settings on the **“Setup Panel”** is completed, click **“Ok(O)”**. After click **“Ok(O)”** button, the **“Main Panel”** will be opened as shown below and MOT file loading is start.



7. After MOT file loading is finished, click **“Start (S)”** on the **“Main Panel”**. (If you want to quit here, click **“Exit”**. If you want to return again to the **“Setup Panel”**, click **“Setup(Z)”**).
8. After erasing of the flash memory, the new software will be written to the flash memory. During the processing, the progress status can be confirmed by means of the **“Process”** indicator. If the indicator does not go advance for some reason, click **“Emergency stop(C)”** to stop the work, connect again, and confirm the settings.
9. When erasing and writing of the flash memory is completed, the **“Process”** indicator reaches 100%, and a black dot appears for **“Waiting to start or Complete”** of **“Operating information”**. (See next page)



10. When the above status is gotten, click “**Exit(X)**” to end the program.
11. When the version upgrade is completed, turn off the power of AJ-HD3700H and remove the version up tool.
12. Turn on the power of AJ-HD3700H and open the TEST menu to confirm that the version is upgrade.

11-3. Version Upgrade procedure of PLD (ALTERA)

11-3-1. Preparation

1. Following items are required for version upgrade.

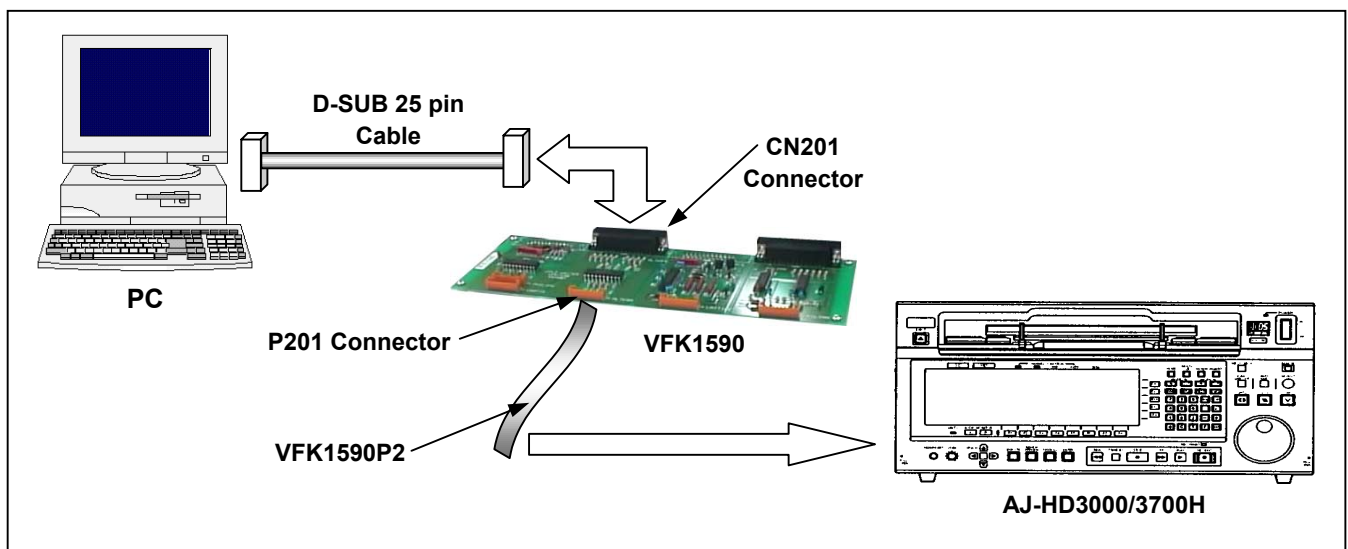
ITEM	REMARK
CPLD WRITER	VFK1590
D-sub 25pin-25pin Cable	Straight (Male – Female), Length : within 1 meter
Version Upgrade Software	MAX+plus II Software (Please download from www.altera.com/support/device/programming/sup-asap2.html Then select "asap2.exe9.6")
Version Upgrade Data	tdf file ("VSIXXXX" include it)
Personal Computer	WINDOWS 95® or 98®

11-3-2. Connection

1. Connect the D-sub 25P cable between CN201(for ALTERA) connector of the CPLD WRITER and Personal Computer(Printer port).
2. Connect the CPLD WRITER cable(VFK1590P2) between respective connector (Please refer to chart on page INF3) and connector P201 on CPLD WRITER.

NOTE: VFK1590P2 is accessory with VFK1590 and it can be order as service part.

3. Turn on VTR and Personal Computer (Windows mode).

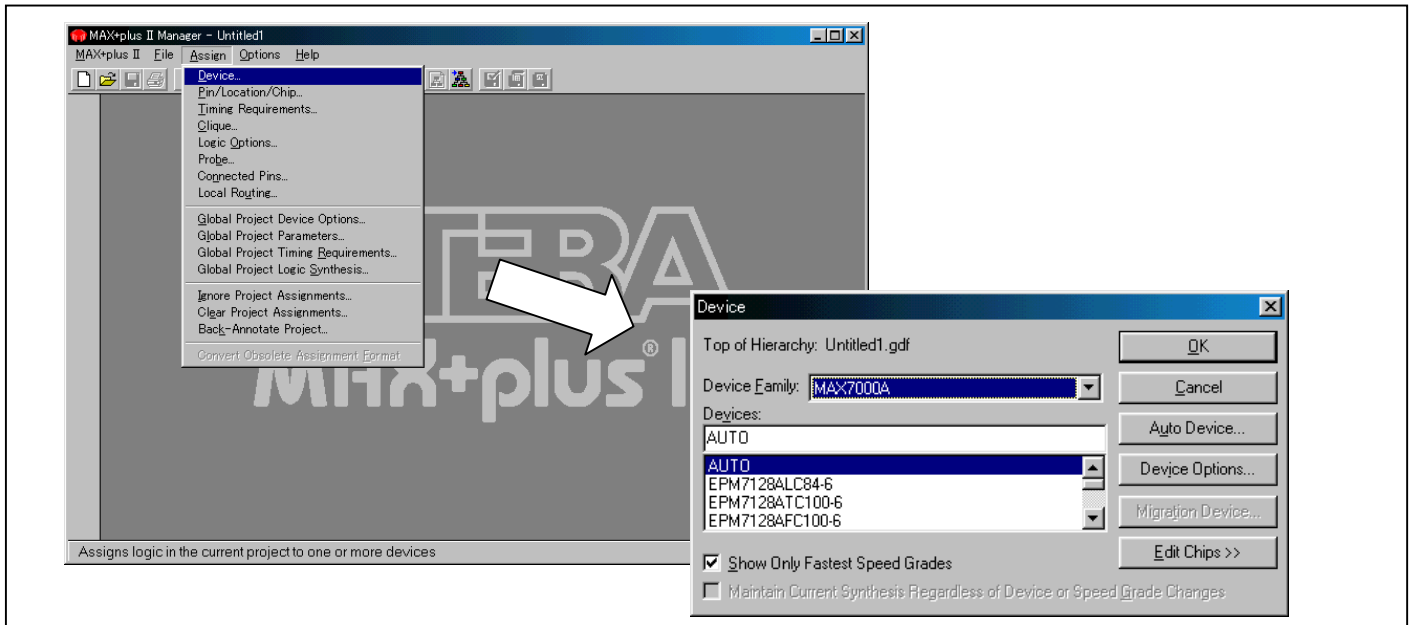


11-3-3. Boot up the Version Up Software and Version Up Procedure

1. Boot up the “MAX+plus II 9.6 Programmer Only” software from start menu of Windows.
2. Implement the initial setting of Version Up software as shown below.

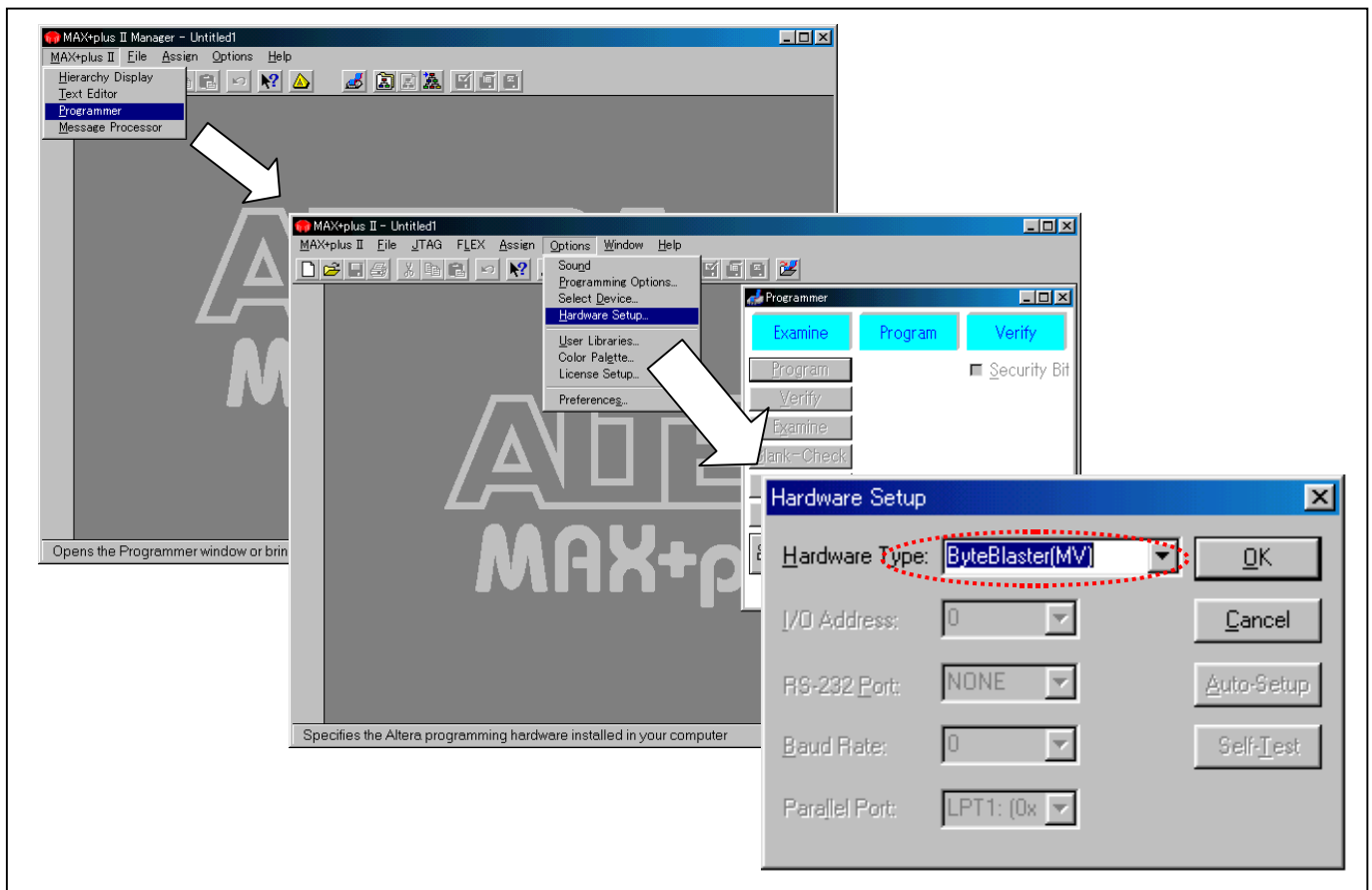
PLD Device Setting

- ① On main window, select tab “Assign” and then “Device”.
- ② At Device dialog, set the Device Family to “MAX7000A” (Device item : “AUTO”)

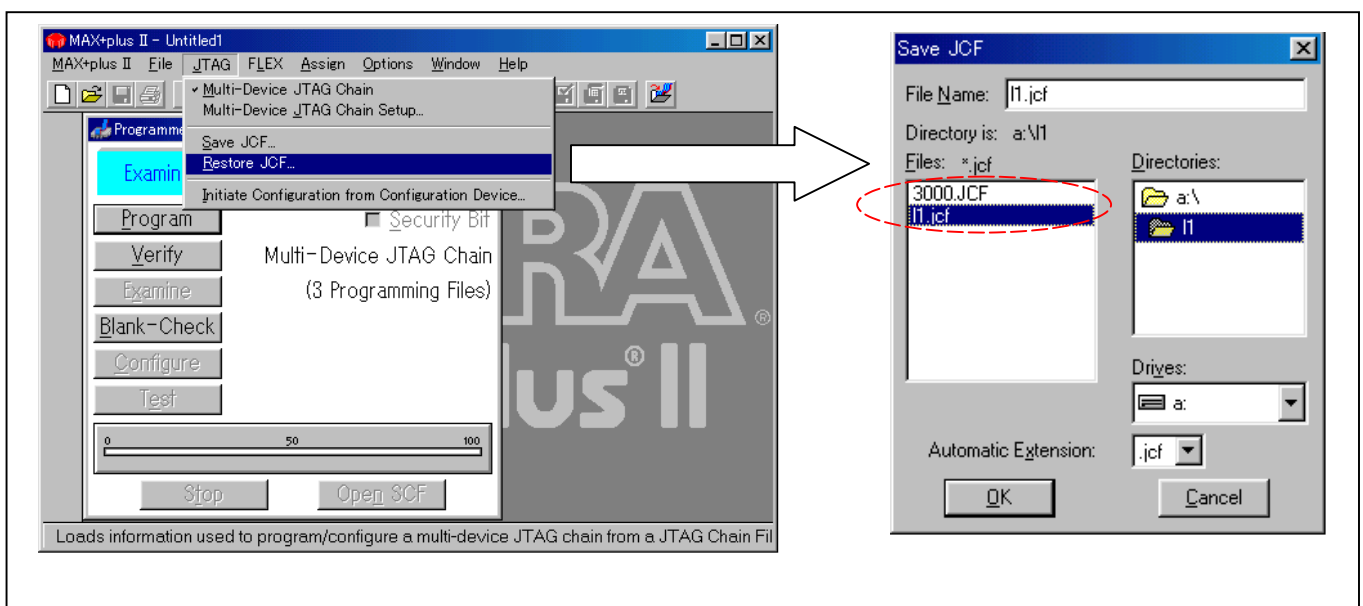


Output Port setting

- ① On main window, select tab “MAX+plus II” and then “Programmer”.
- ② On main window (Programmer window is displayed), select tab “Option” and then “Hardware Setup”.
- ③ On Hardware Setup dialog, set the “Hardware Type” to “ByteBlaster(MV)”.



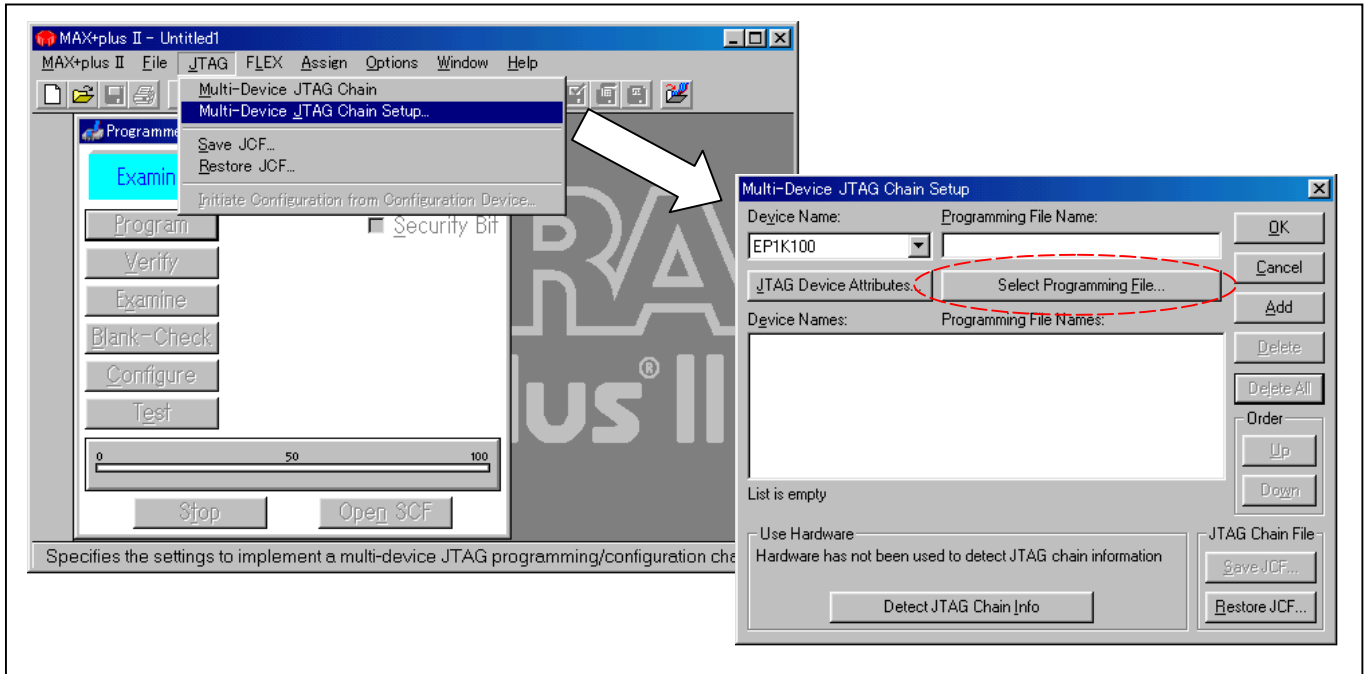
3. On main window, select tab “JTAG” and then “Restore JCF”.
4. On dialog of Save JCF, select the “jcf” format file (Chain file) and then press “OK” button.



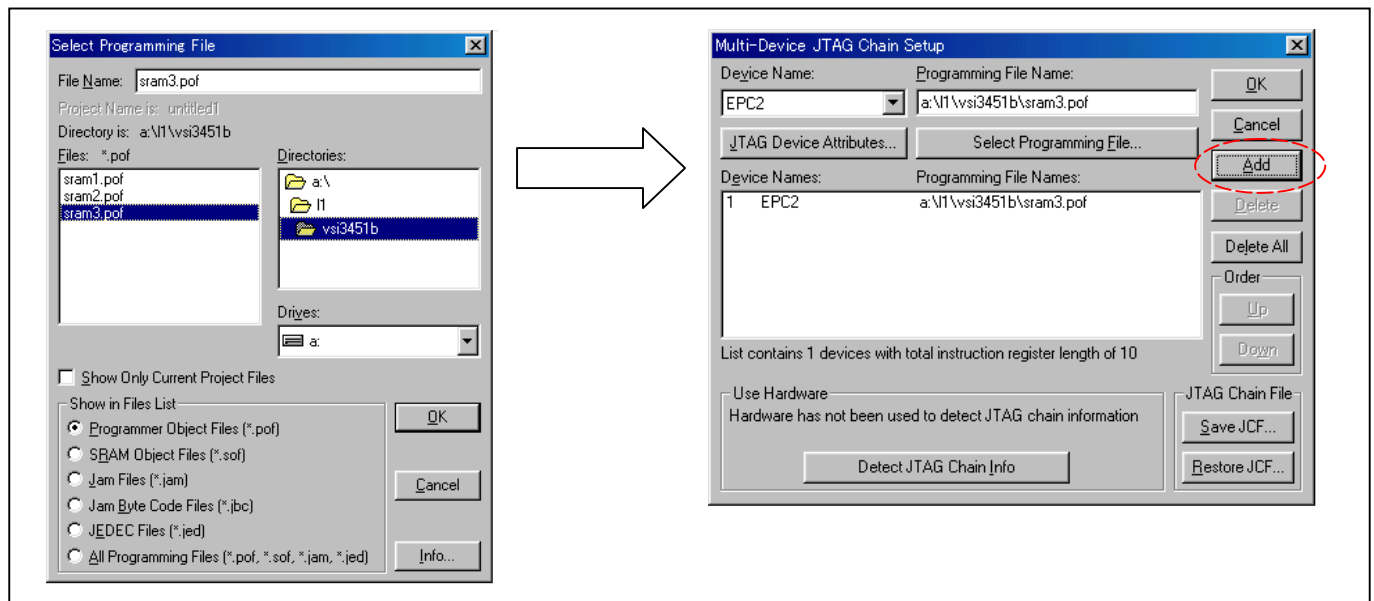
<NOTE: How to create Chain file>

In case the some PLDs are installed on the board, those can be upgrade by chain file (jcf format) at once. If the chain file isn't created, please create it by following procedure (ex. L1 board)

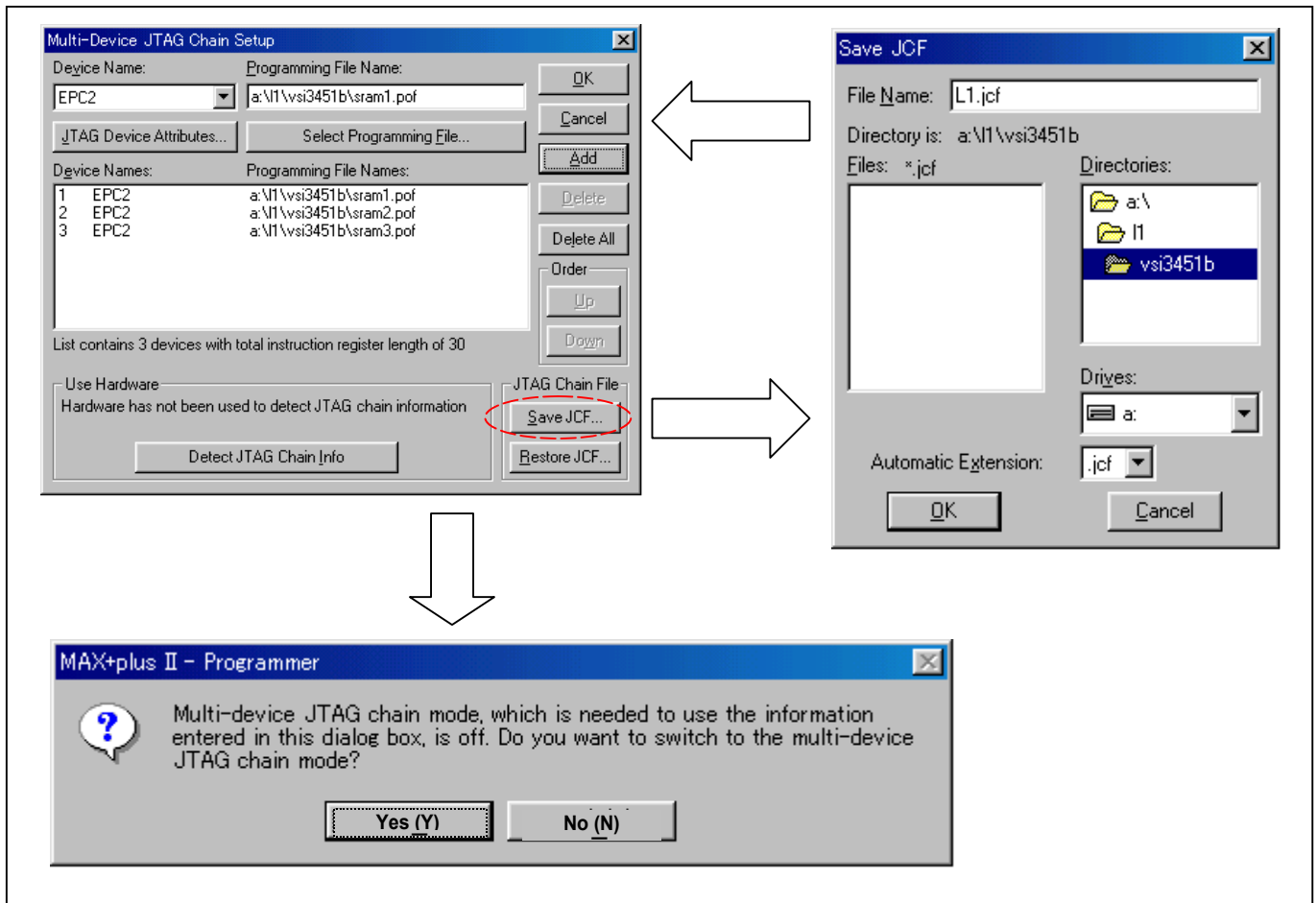
1. On main window, select tab “**JATG**” and then “**Multi-Device JATG Chain Setup**” for open “**Multi-Device JATG Chain Setup**” screen



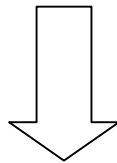
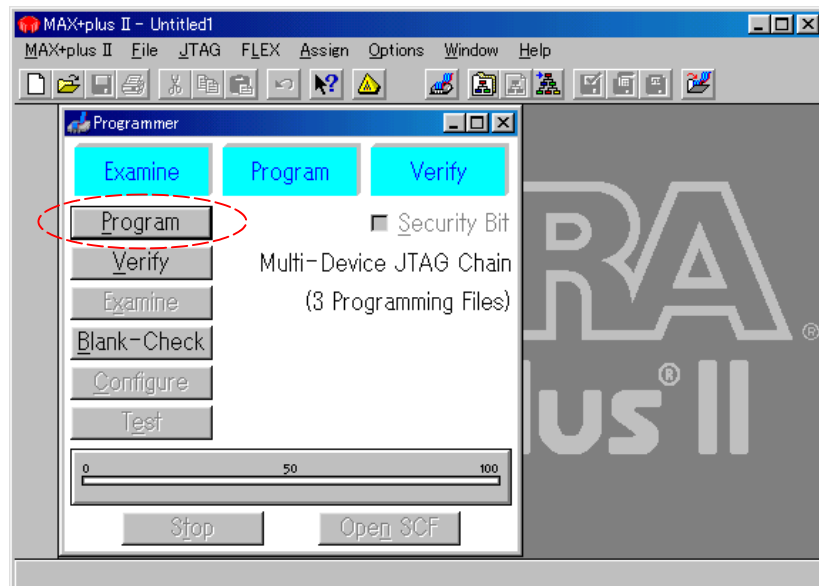
2. Click the “**Select Program File**” button for open the “**Select Program File**” screen. And select the drive to select the “**.pof**” file. In case of the 3 pieces of pof files, select the pof file from the biggest number of file and click “**OK**” button then “**Multi-Device JATG Chain Setup**” screen is displayed.
3. Click “**Add**” button on “**Multi-Device JATG Chain Setup**” screen.



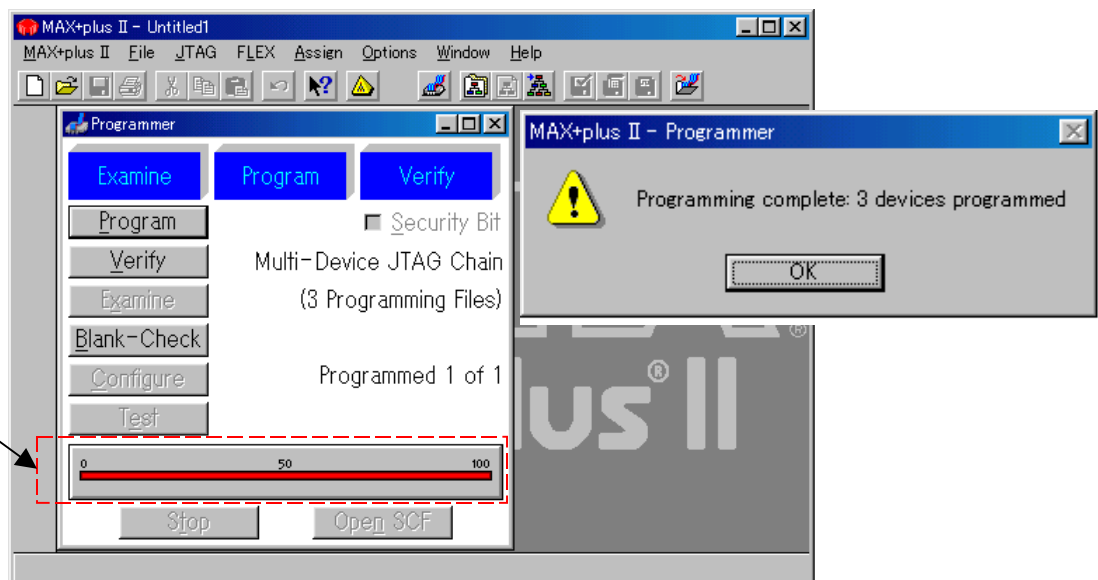
4. Repeat procedure of item 2 and 3 for copy the pof file.
5. Click “**JCF**” button and then open the “**Save JCF**” screen.
6. Input the File Name and click “**OK**” button, then return to “**Multi Device JATG Chain Setup**” screen.
7. Click “**OK**” button on “**Multi Device JATG Chain Setup**” screen, then the message appears to ask if you set to Multi Device JATG Chain mode or not. Please select “**Yes**”.



5. Click the **“Program”** button on **“Programmer”** dialog screen.
6. When Progress Bar reaches at the point of **“100”**, the message **“Program Complete”** appears, then PLD version upgrade is completed.
7. Click **“OK”** button on the **“Programming complete”** message dialog.



Progress Bar



11-4. Version Upgrade procedure of PLD (XILINX)

11-4-1. Preparation

1. Following items are required for version upgrade.

ITEM	REMARK
CPLD WRITER	VFK1590
D-sub 25pin-25pin Cable	Straight (Male – Female), Length : Within 1 meter
Version Upgrade Software	JTAG Programmer Software (Please download from www.xilinx.com)
Version Upgrade Data	CDF File ("VSIXXXX" include it)
Personal Computer	WINDOWS 95® or 98®

11-4-2. Connection

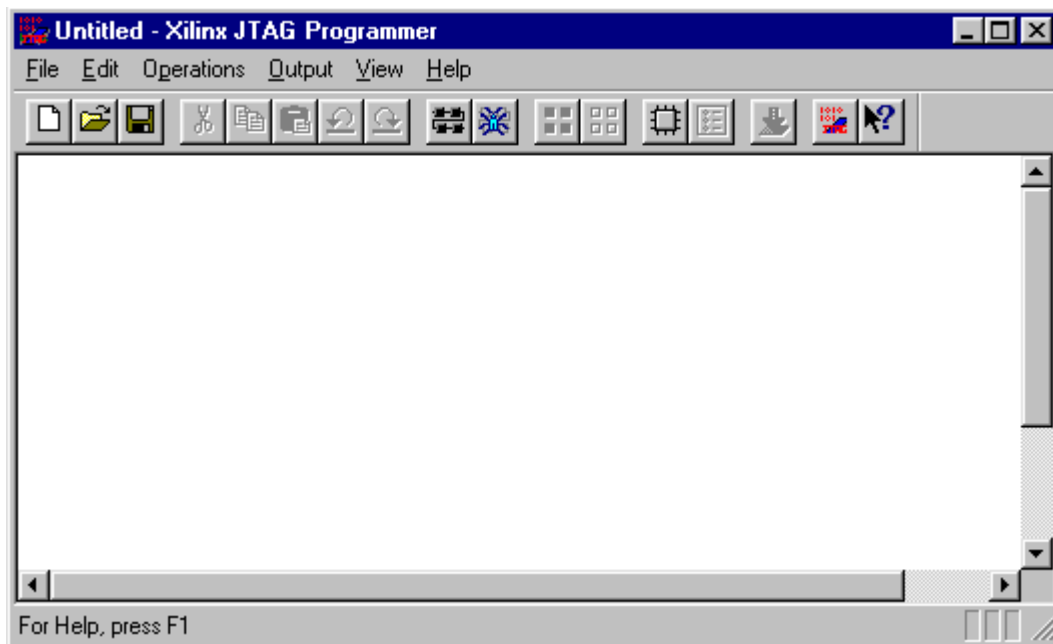
1. Connect the D-sub cable between CN401 connector of the CPLD WRITER and Personal Computer (Printer port).
2. Connect the CPLD WRITER Cable (VFK1590P4) between respective connector (Please refer to chart on page INF3) and P4 connector of CPLD WRITER.

NOTE: VFK1590P2 is accessory with VFK1590 and it can be order as service part.

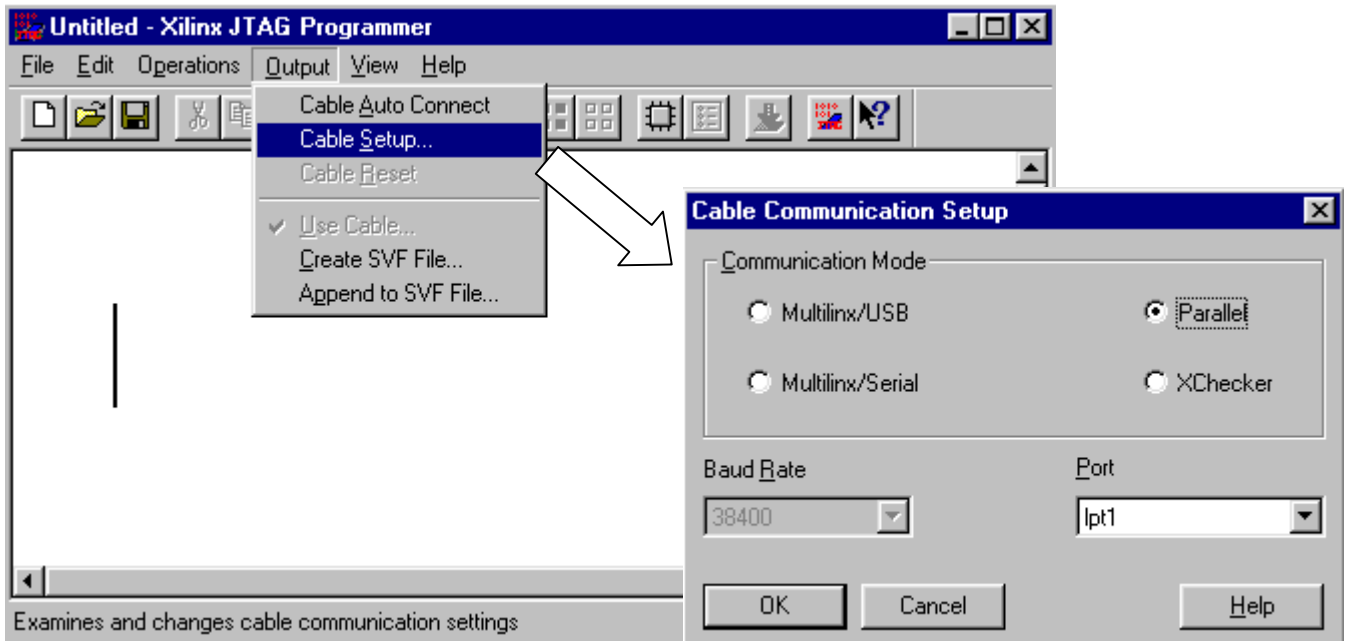
3. Turn on VTR and Personal Computer (Windows mode).

11-4-3. Boot up the Version Up Software and Version Up Procedure

1. After download the program, unpack the software. Click the start button of windows program "Xilinx CPLD Webpack", then Device Program is boot up and following screen is appeared.



- Click **“OUTPUT”** on the menu and select **“Cable Setup”**, then the **“Cable Communication Setup”** screen is open. Select **“Parallel”** on Communication Mode (**“Port”** is set to **“lpt1”** as default).

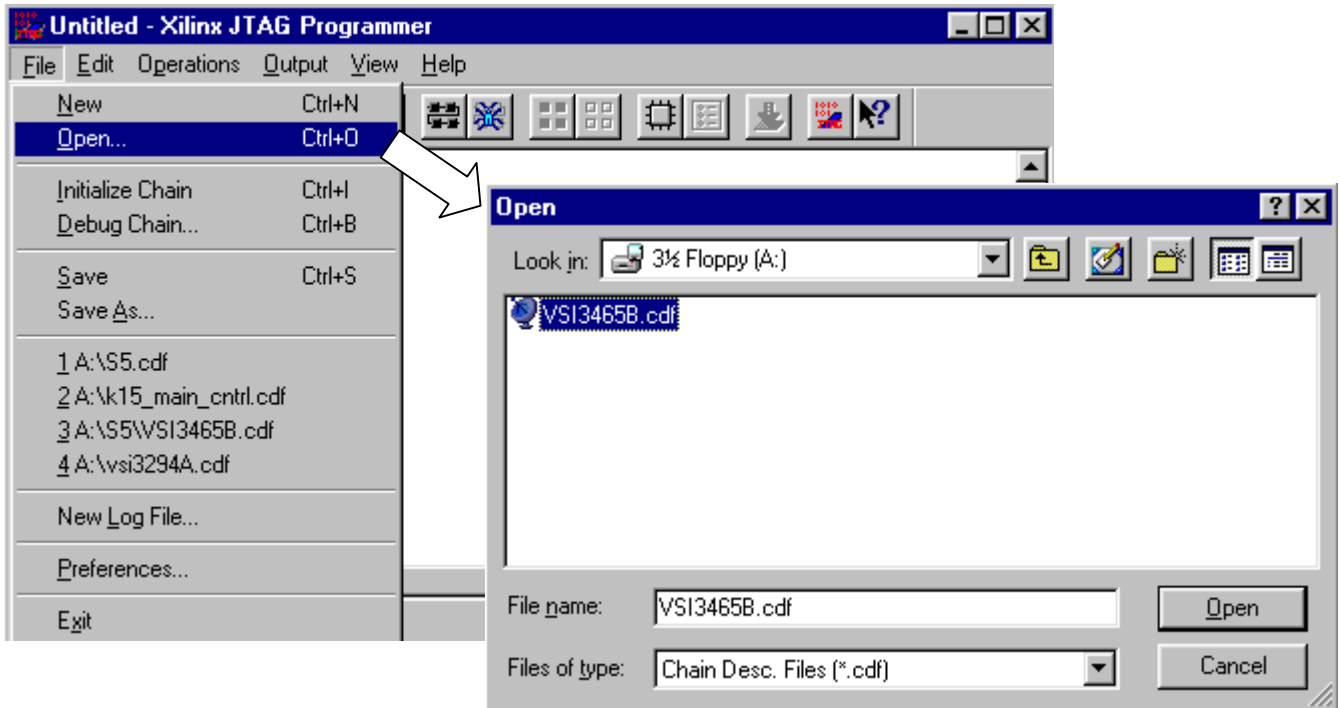


- If connection is correct, message indicated below appears.

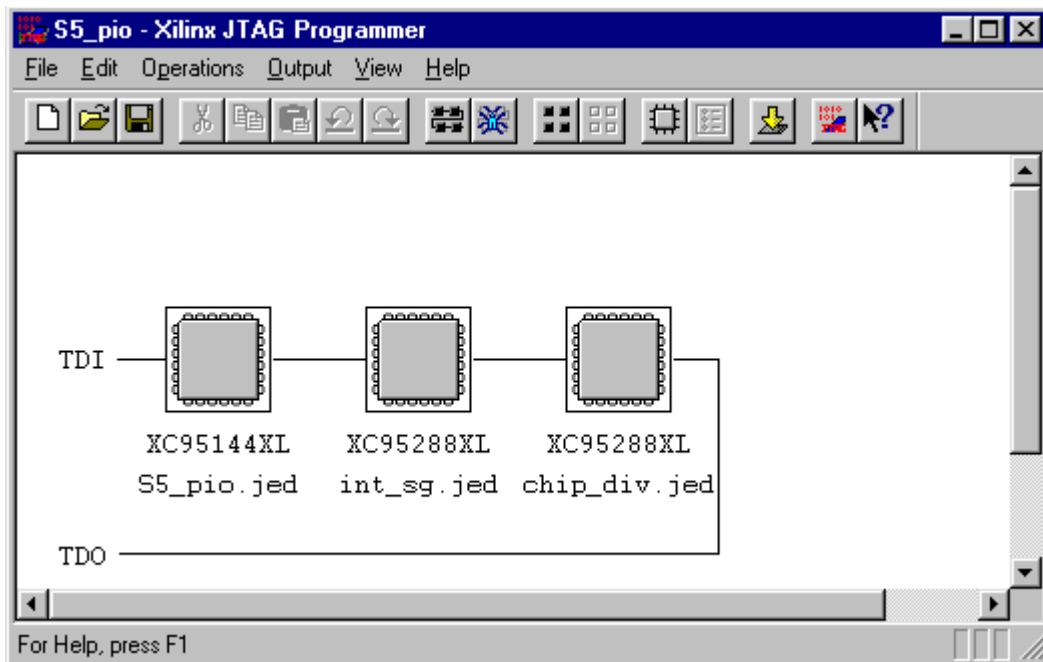


- Click **“OK”** button.

5. Insert the update floppy disk into A drive.
6. Click **"FILE"** and **"Open"** and select the target file. This file is called Chain file, because one file can write several CPLDs like a chain.

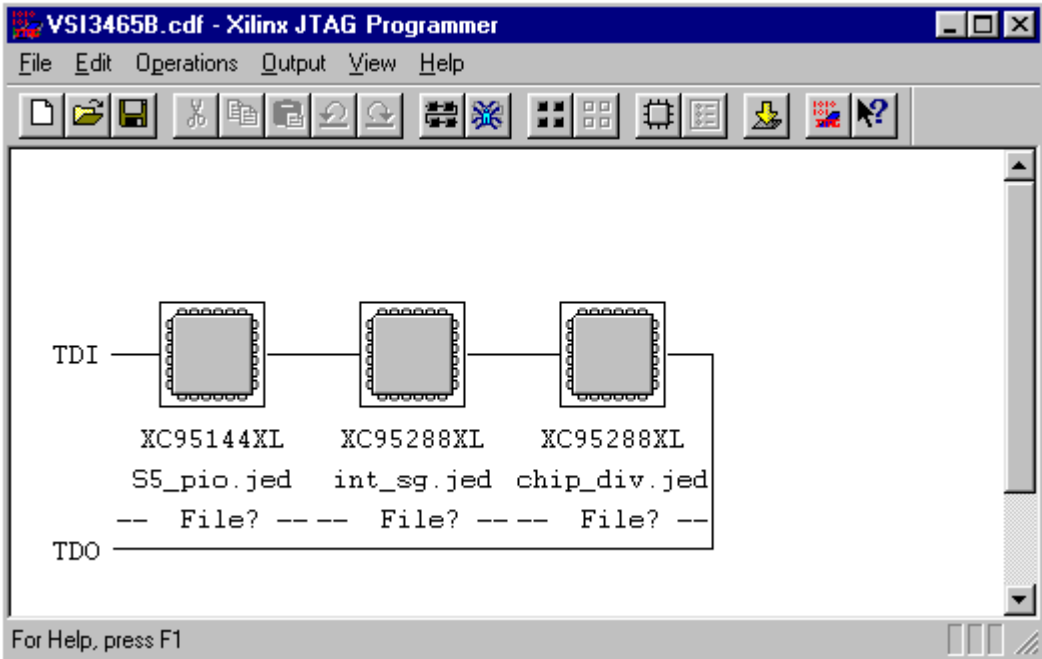


7. Click **"open"** button, then following screen appears.



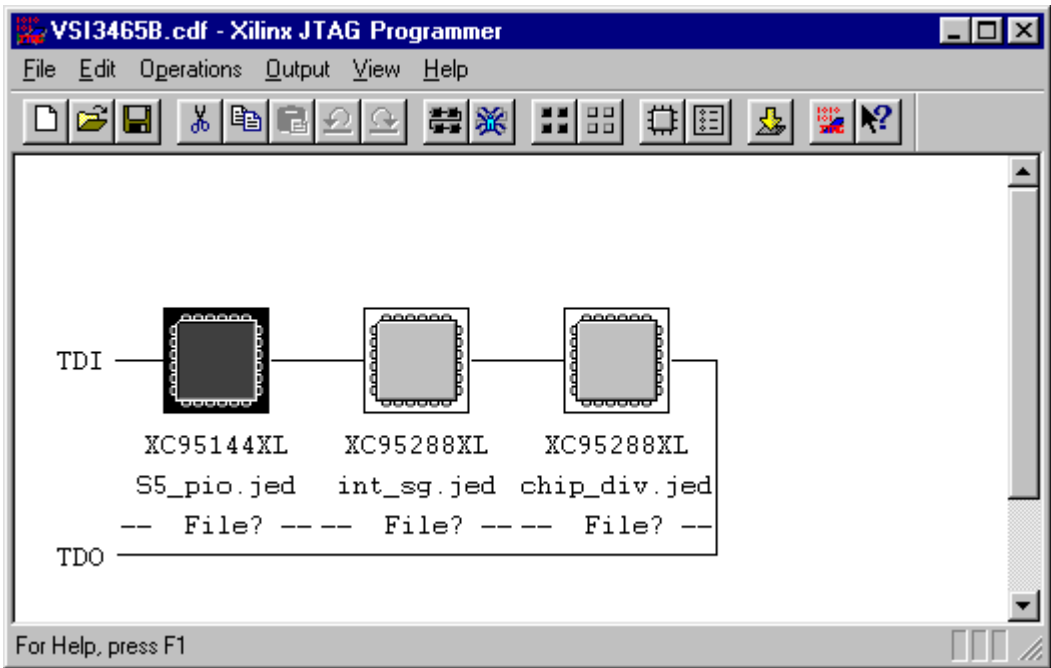
<NOTE: In case the file can not be loaded to Version Up software.>

At the procedure item 6 and 7, If file isn't loaded to Version Up software correctly, the word “- - - File? - - -” is displayed under IC mark as indicated below.

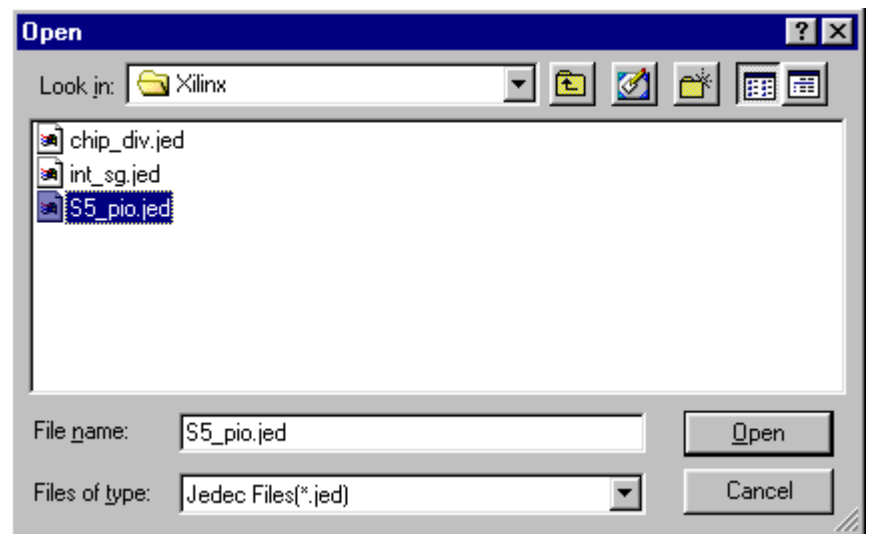
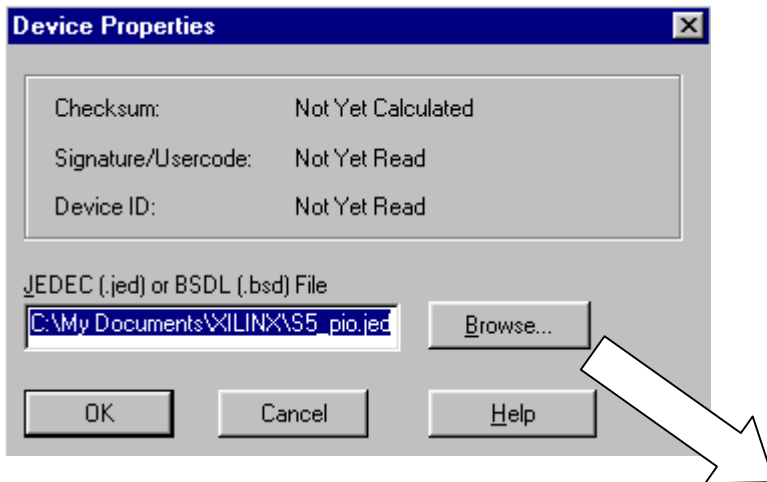


In this case the Version Up software does not detect file path. Please set file pass as follows.

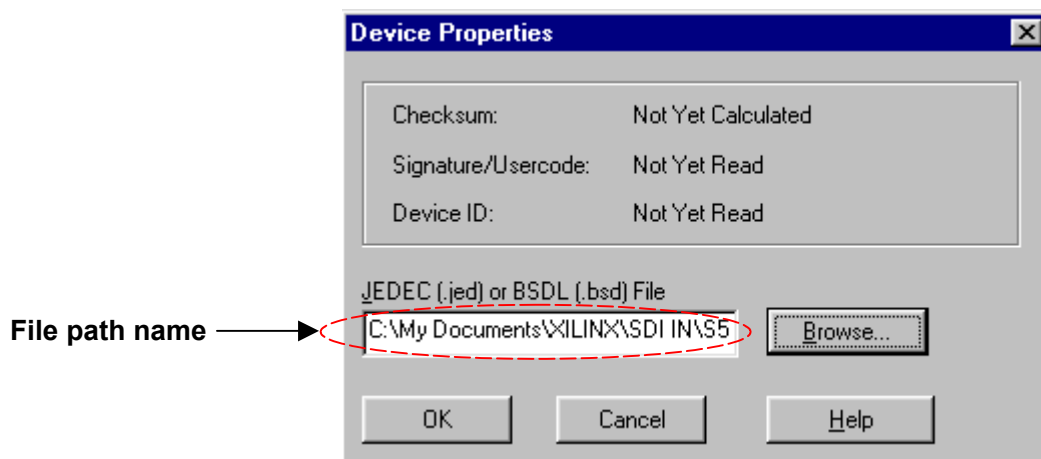
1. Click mark on IC, then cursol appears on IC mark.



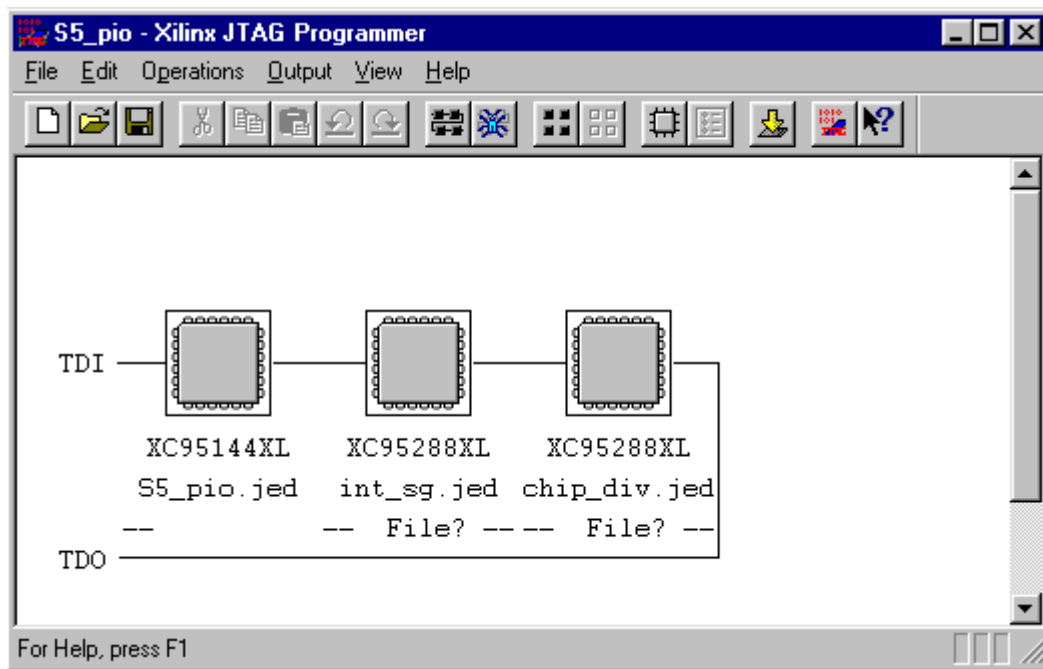
2. Double click to mark on IC in screen, then the “**Device Properties**” screen is opened and select “**Browse**” button to open screen.



3. Select target file and click “**open**” button.
4. Then “**Device Properties**” screen is opened and corrected file path is displayed. Click “**OK**” button.

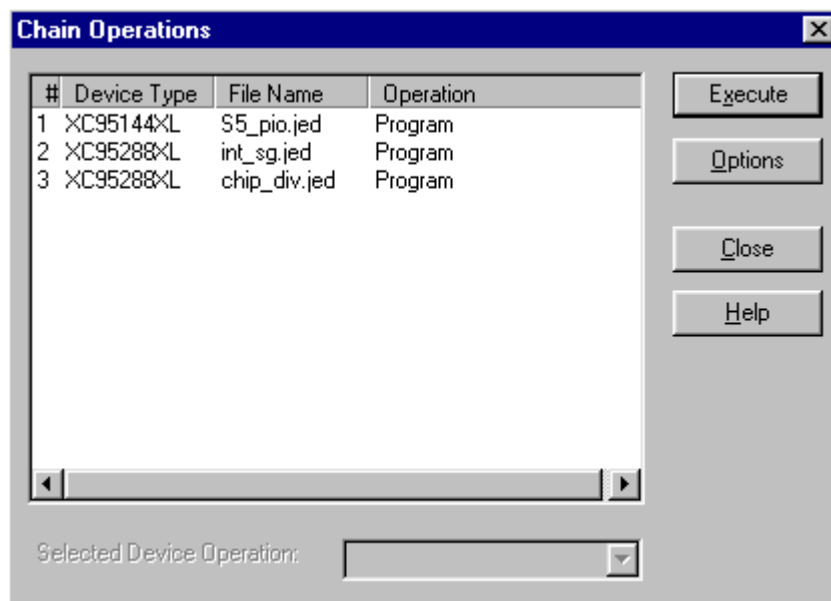


5. The word “- - - File? - - -” is disapperred as following screen.

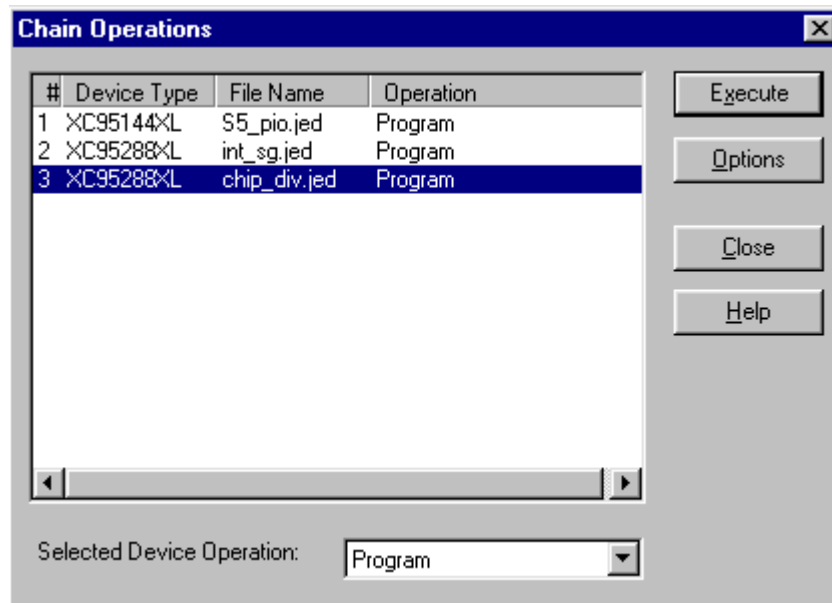


The same operation should be done to other IC.

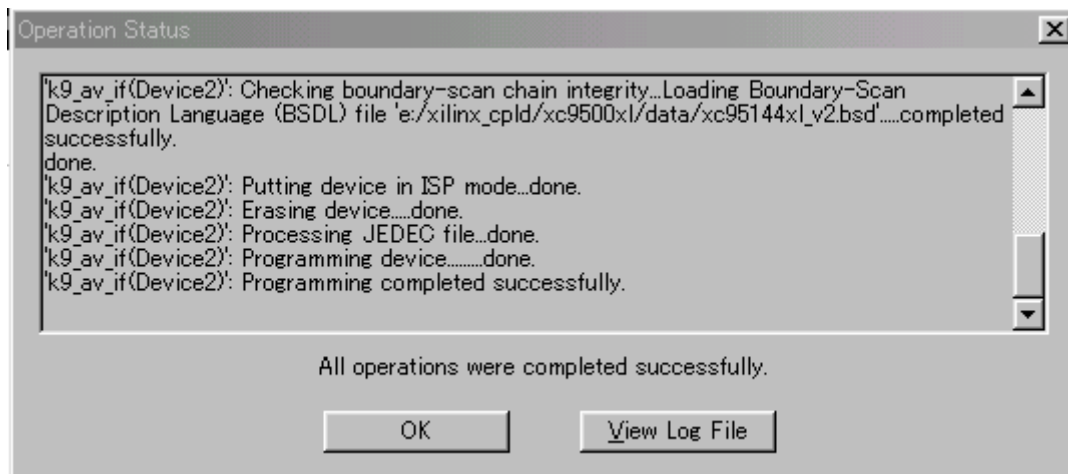
8. Then click “**Operations**” on the menu and select “**Chain Opeartion**”. Then following screen appears.



9. Select device in “Device Type” column and select **“Program”** on Selected Device Operation. This operation should be done to all files.



11. Turn power on of VTR.
12. Click **“Excute”** button and after completion of data writing the following message is displayed. **“All Operations were completed successfully”**.



12. CAUTION FOR M1 BOARD EXCHANGED

When the board is exchanged, basically switch setting and software version should be set to original board.
In case M1 board, it has NVRAM.

NVRAM stores User file data, Adjustment data and Error Log data. And also initial setting information is stored in memory.

12-1. Transfer the NVRAM data.

NVRAM stores User file data, Adjustment data and Error Log data.

Therefore when M1 board is exchanged, install original NVRAM to new board or transfer User file data, Adjustment data and Error Log data to New PCB with IC card.

NOTE: Please be careful to remove the NVRAM from IC socket, because some components are soldered on the other side of board where NVRAM is located.

12-2. Confirmation of default setting

Some function and display as shown following table are different among models. Therefore confirmation is required for M1 board exchange or factory load. It setting is controlled by Test menu as follows.

①.Open the TEST menu

②.Default setting can be set by press **[F]** and **[F12]** (SERVICE) key together.

P --- HD3700P
P-M --- HD3700P-M (M kit corresponded)
HP --- HD3700HP
HT --- HD3700HT
HE --- HD3700HE

This function is available from following indicated version.

FRONT more than 0.04E

SYSCON more than 0.12E

NOTE: FRONT and SYSCON software should be matched.

FUNCTION	HD3700P	HD3700P-M	HD3700HP	HD3700HE	HD3700HT
DOLBY-E	Not available	Available	Available	Available	Available
PRE-READ	Not available	Available	Available	Available	Available
Audio 8ch on 1080I and 720P mode	Not available	Available	Available	Available	Available
VIDEO CONV. Menu display (UDC menu display)	FIT_H	FIT_H	FIT_H	FIT_H	LT_BOX
	FIT_V	FIT_V	FIT_V	FIT_V	S_CROP
	FIT_HV	FIT_HV	FIT_HV	FIT_HV	SQUEES
SYSTEM FORMAT FACTORY Setting	1080/23psf	1080/23psf	1080/23psf	1080/50I	1080/59I

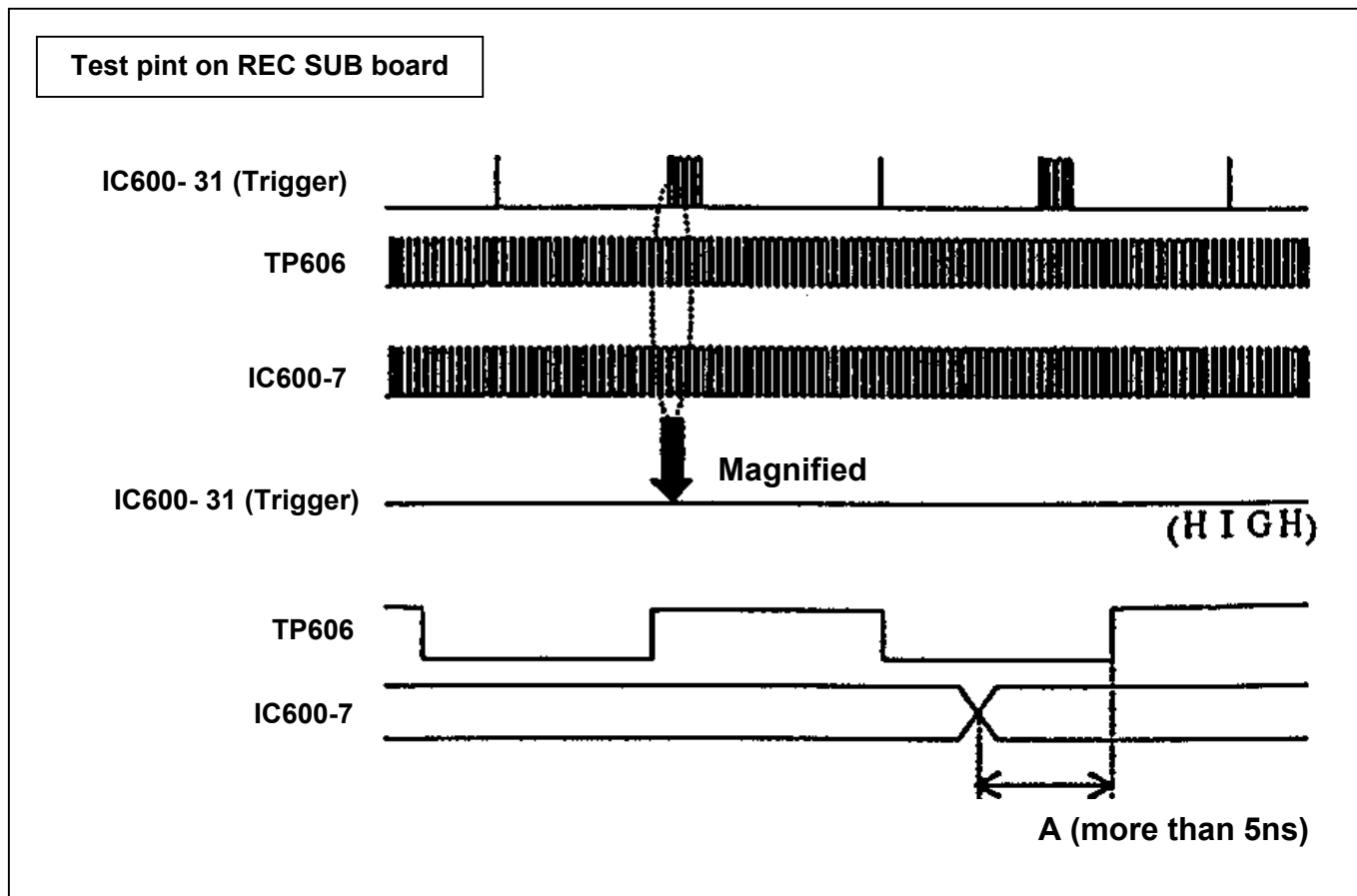
12-3. L1 SDRAM CLK Timing Setting. (Video Field Memory read timing adjustment)

DATA and CLK latch timing of Video Field memory (SDRAM) on L1 board should be set by switch on M1 board.
It is different among models.

Some adjustment should be performed to 4 pieces of Field Memory (IC600、601、602、603).

<Adjustment Process: In case IC600>

1. Connect the scope to TP606, pin 7 of IC600 and pin 31 of IC300 on REC SUB board.
 2. The trigger is rising edge of pulse at pin 31 of IC600.
 3. Confirm that the portion A (between rising edge of TP606 and changing point of waveform at pin7 of IC600) is more than 5ns as shown below.
- In case more than 5ns, set bit 1 of SW6501 on M1 board to ON.
 - In case less than 5ns, set bit 1 of SW6501 on M1 board to OFF.



NOTE: Scope more than 500M type should be used.

12-4. Confirmation item to exchange M1 board.

Please perform following items to exchange M1 board.

1. Confirmation of software version

PLD, EPROM and FLASH ROM (Refer to item 10 and 11 in this section)

2. Confirmation of SW setting.

SW2000, SW6051 and SW6071 (Refer to item 9 in this section)

NOTE: Set Bit 1 of SW6071 to ON position.

3. Transfer the NVRAM data.

4. Set to default setting

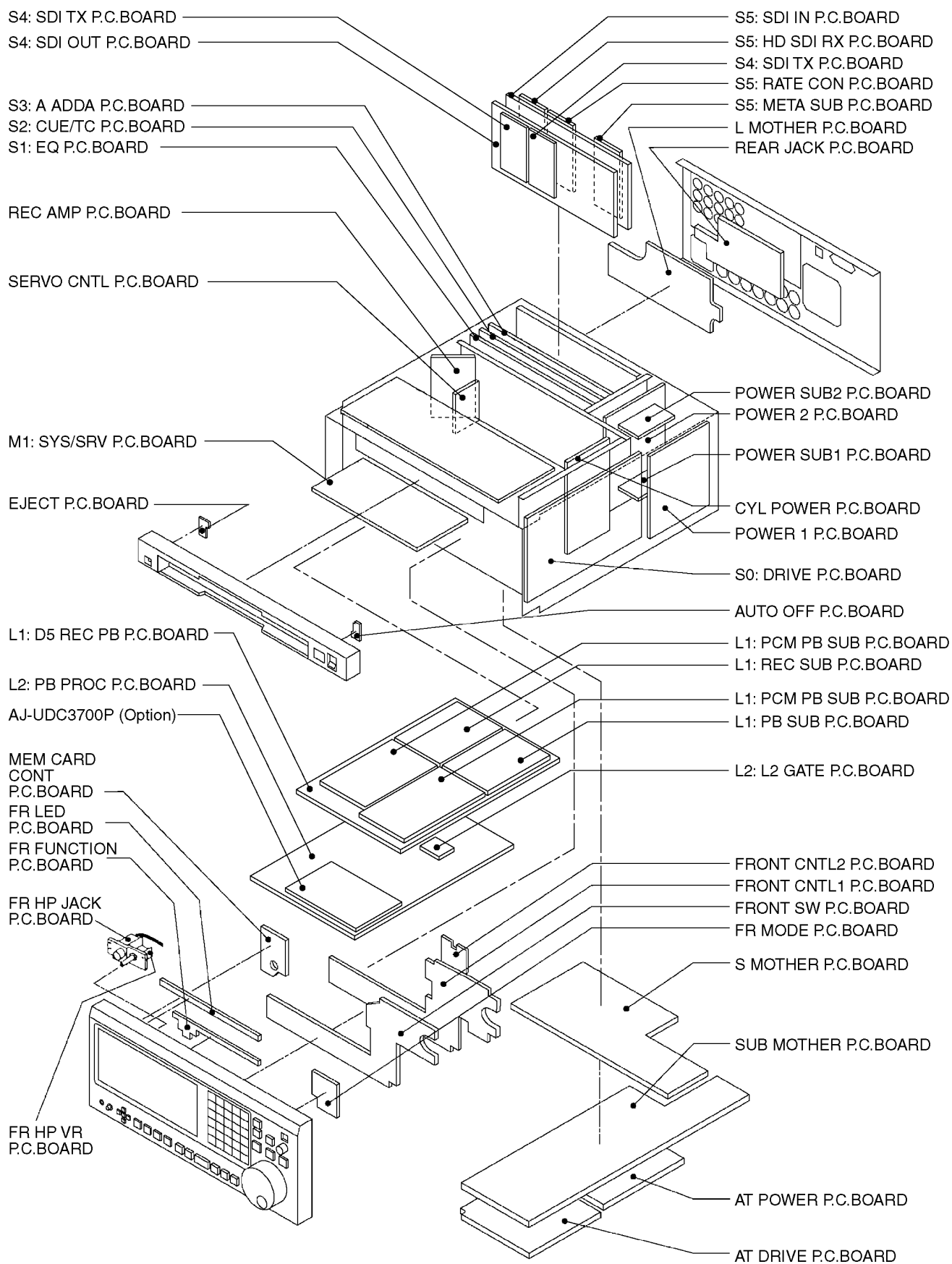
5. L1 SDRAM CLK Timing

The bit1 of SW6501 to set to original position.(Not require adjustment)

6. Load the factory data on USER SETUP menu.

7. In case using new NVRAM, initialize the Error Log data on TEST IC CARD ERR LOG menu.

13. Circuit Board Layout (AJ-HD3700H)



14. Explanation of Overall Block

In this description, overall signal flow of AJ-HD3700H is explained based on over all block diagram in section 5. However, since some explanation may be details which aren't described on overall block diagram, please refer to overall block diagram and also individual circuit block diagram to confirm it.

14-1. SDI IN Board (S5)

In SDI IN board, HD and SD serial digital input signal is converted to D5 format.
The main functions are shown below.

1. HD DECODE (HD SDI RX PC Board)
2. SD DECODE
3. VIDEO INT SG
4. Frequency Conversion (RATE CONV. Board)
5. META Data separation (META SUB Board)
6. HD data compression and conversion into D5 format
7. SD format conversion into D5 format

14-1-1. HD SDI Input (HD SDI RX Board)

HD SDI input signal from the rear panel is directly sent to HD SDI RX board on SDI IN board. HD SDI RX board is the same board as it of AJ-HD150 and AJ-UFC1800.

NOTE: HD SDI RX PC board is used in the following models.

AJ-HD130, AJ-HD150, AJ-HDC20, AJ-HDC27, AJ-HDP151, AJ-UFC1800

The signal, that comes to HD SDI RX board, goes to HD IN EQ circuit and then high frequency component is compensated. Because the signal is degraded due to high transmission rate of HD, 1.5 Gbps.

HD SDI Input: SMPTE 291M, SMPTE 292M (1.5Gbps: Embedded Audio, Time Code)

The signal, that was locked with PLL CLK in Y/C SEP IC, is supplied to HD THROUGH out..

The Y and C signals from YC SEP IC are sent to HD DECODER IC, and then AUDIO DATA is separated from video data.

The Y, C data and Audio Data from HD DECODER IC are sent from HD SDI RX board to SDI IN Boards.

14-1-2. SD SDI Input Signals

SD SDI input signal is supplied from the rear panel to SDI IN board directory. The signal is sent to EQ & CLK GEN IC and then it's level compensate and the CLK is generated by the data. Then the signal is converted to parallel from serial by the S/P IC, and the parallel signal is supplied as 10 bit signal. It is also supplied to SD THROUGH OUT terminal from S/P IC. The AUDIO DATA is separated from the signal in SIF DECODER IC. The SD or HD AUDIO data is sent to FPGA(it is described as HD/SD AUDIO SEL in block diagram), and the HD or SD format audio data selected by menu of "SET UP SYSTEM" is sent to L1 PC board.

There is a VIDEO INT SG circuit on SDI IN board. The INT SG signal selected by the VIDEO IN menu is sent to the two of the DUAL PORT RAM through AV BUS. Then the INT SG data is stored in the AV micro-computer on the M1 board. The SG signal is sent to the PLD and the format is controlled according with the selected SD or HD format.

SD YC and INT SG Y uses the same line, but the INT SG is not supplied unless INT SG is selected by menu. HD YC or SD YC data is sent to SEL IC (HD/SD AUDIO SEL) and the HD or SD is selected by SYSTEM menu.

14-1-3. HD SDI Signal Process

HD signal process is explained below.

RATE CONV PC board is in AJ-HD3700H. If the input signal is HD23/24P or 50I mode, the signal is processed through the RATE CONV circuit and data width is changed according to the frequency rate.

In case of 23/24P mode, input data is written by CLK74 to IC and it is read by CLK58 from IC on RATE CONV. Board. The CLK58 rate data is sent to 4 CHIP DRIVER IC. There are 4 pieces of compression IC (A to D). Therefore the signal is distributed to YE, YO, Pb and Pr data by 4 CHIP DRIVER IC and it supplied to compression ICs. As this data rate is 29M, the CLK is CLK29 as data input to compression IC and then data rate is 28M as output from compression IC. The compression IC uses DCT and VLC process for its compression, and the compressed signal becomes D5 format. The compression rate is 1/4. The compression process is done per each field. Therefore 23/24P signal is processed as 48I after compression circuit.

The 59I mode signal goes through the RATE CON circuit. RATE CON processed signal or the non-processed signal is selected by the SEL IC. Then the signal is sent to the compression IC by 4 CHIP DRIVER.

META SUB Board is added on SDI IN board to process VANC (Vertical Ancillary) signal. META data means VANC and HANC signal, but META SUB board only support VANC signal. The VANC signal in V blanking period is extracted on META SUB board. The META data is recorded without compression. The VANC data from META SUB board is sent to FPGA (HD/SD AUDIO SEL) IC in SD mode. The 4 CHIP DATA MUX LINE BLANKING is composed of 2 Latch ICs and compression IC (A to D) are multiplexed the YE, YO, Pb and Pr data, then goes through the Latch IC and VANC data is multiplexed and sent to L1 board.

14-1-4. SD Signal Process

The SD signal is selected by HD/SD circuit and sent to the FPGA (HD/SD AUDIO SEL IC). In the FPGA circuit, VITC is detected and Framing pulse which is made from H and V sync is supplied. The SD signal is supplied from the FPGA as D5 format. Then the signal is sent to the 4 CHIP DATA MUX BLANKING Latch IC and sent to the L1 board through same signal line with HD signal.

14-1-5. INPUT CHECK Signal

If the INPUT CHECK button on the Front panel is pressed, the INPUT CHECK signal is output. The INPUT CHECK signal is separated to video and audio signals. The INPUT CHECK signal for the Video signal is sent to S5 and S4 board. The HD and SD signals through the HD/SD SEL IC is converted to serial data and sent to S4 board.

14-2. D5 REC PB board (L1)

On D5 REC PB board, the signal for recording or playing is processed as D5 format style.

14-2-1. REC VIDEO signal

The REC VIDEO signal is supplied from SDI IN board. The HD data is supplied as 8 bit parallel data and SD data is supplied as 10 bit parallel data. Why HD data is supplied as 8 bit data, because the COMP IC in SDI IN circuit to process as 8 bit data. SD data is converted to 8 bit in the shuffling circuit(AV REC IC). The REC DATA is supplied to IC3017 (REC PLD: FPGA). The main functions of the REC PLD are as follows.

(REC PLD functions)

1. VITC and Format ID multiplex to Video data
2. Making EE1 signal from Video Data
The EE1 signal does not go through any SUB board. Therefore, if the EE1 signal is wrong, remove the SUB board and check the related ICs. But the signal form can not be observed even a RAMP signal is supplied. Therefore check if the each bit exist or not.
3. PLL Lock in SD mode
In SD mode "IN 27M CLK" is supplied to the REC PLD.
The REC PLD works in 27M for input mode and in 36M for internal clock rate.

The video data is sent to AV REC IC on REC SUB board from REC PLD circuit. The AV REC IC's internal process is same as D5. The CH0 to CH3 (4 channels) signals, which are done 14/7 conversion, are separated to 2 ways and one of them is used as EE3.

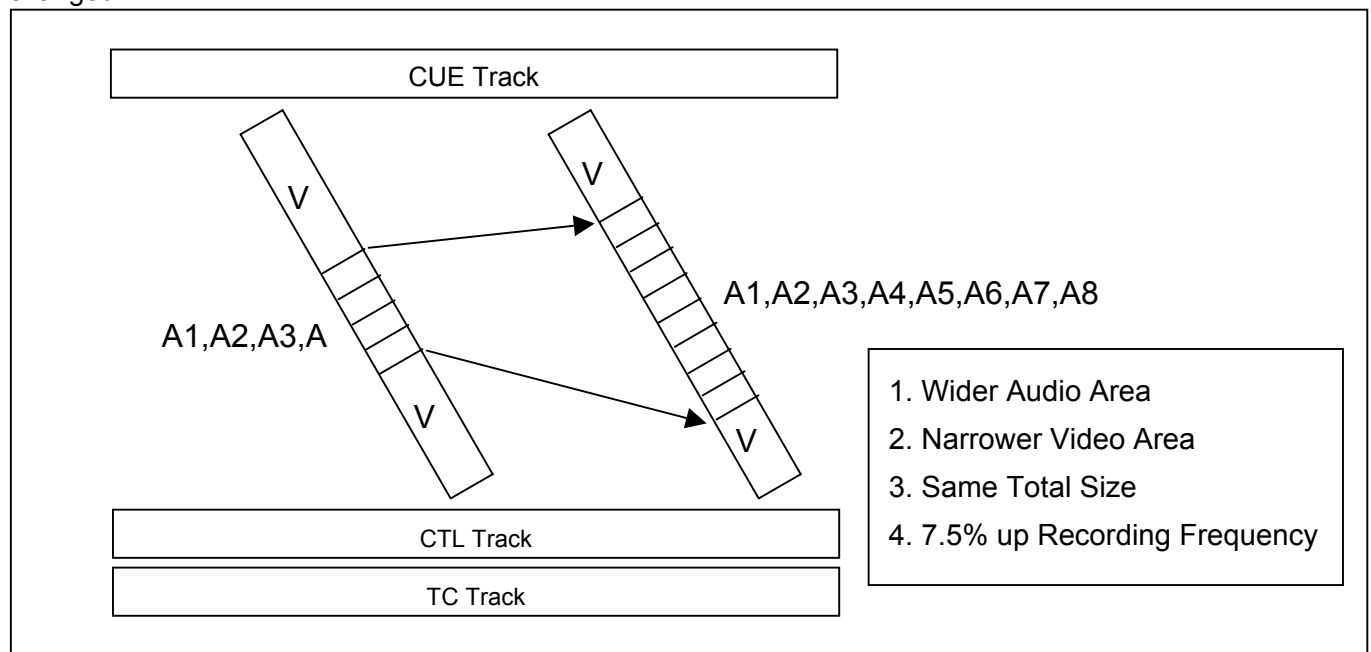
The signal which comes to REC AMP board go through P/S conversion and ECL/TTL conversion and then sent to the main board. After that, sent to REC AMP board. The EE1 data is sent to the PB circuit. At that time, for synchronization, the phase is delayed 90 degrees by the FIELD MEMORY.

<For your reference: Tape format>

The basic tape format is exactly same as HDD5. But, in audio 8ch record, the tape pattern is different and there is no compatibility.

In the D5 tape format, the 4 channels of audio are located at center of the helical track.

To record the 8 channel of audio without dropping the bit rate, the video area is narrower and audio area is wider and also recording frequency is 7.5% higher. The recording frequency is 133.8MHz as for 59.94 4ch format and the recording frequency is 143.8MHz as for 59.94 8ch format. The compression rate is not changed.



The tape speed of the 1080/23p and 1080/50i is slower than 1080/59i. In case of the 23p, the ratio is $59.94 \div (23.98 \times 2) = 1.25$ and 2 hours tape can record about 2.5 hours.

The sound of the drum rotation becomes lower according to the tape speed down. This is to keep the tape pattern the same and it can use the same transportation with as D3 and D5.

NOTE: The head can trace the tape track of D3 format tape, but D3 playback signal can not be supported since D3 process circuit is not included in PB circuit.

tape speed	167.228mm/sec (1080/59.94I, 720/59.94p, 480/59.94I)
	139.496mm/sec (1080/50I)
	133.782mm/sec (1080/23.98p, 1080/24p)
record time (MAX.)	L : 124 minutes (1080/59.94I, 720/59.94p, 480/59.94I)
	155 minutes (1080/23.98p, 1080/24p)
	149 minutes (1080/50I)
	M : 63 minutes (1080/59.94I, 720/59.94p, 480/59.94I)

In each format such as the 23p mode, the track angle and the azimuth angle are not changed. The tape speed and drum rotation speed are decreased to keep the same tape pattern.

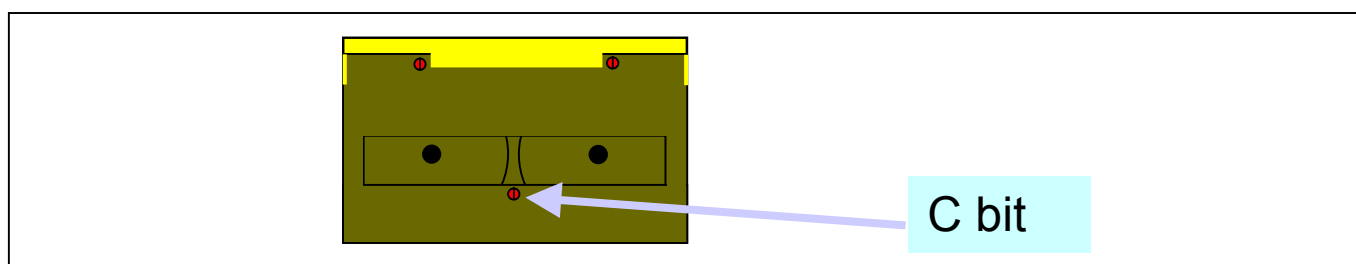
Only the pattern of the 8 channel mode has wider audio area and narrower video area and higher recording frequency. All other part except recording density are the same.

The duties of the CTL track of the current 4 channel model are 6:4, 4:6, 5:5 and they have CF information. In addition to the CF format, mode detection whether 4 channel or 8 channel of audio is added on the CTL duty. And the duties are changed from 6:4 and 4:6 to 7:3 and 3:7 in 8 channel model. Once tape runs, the audio mode is detected immediately.

<For your reference: The concept of 8 channel of Audio>

PCM audio in 1080/24psf (23.98psf) and 1080/50I mode has 8 channel audio only. It in 1080/59.94I and 720/59.94p mode has switchable 4ch or 8ch audio.

The tape formats are different between 4 channel and 8 channel audio mode, so they do not have compatibility between them. For example, if the tape is recorded by AJ-HD3700H in 8 channel audio mode, and it is played by AJ-HD2700, it has no audio and no video output. Therefore the tape may be thought a blank one and it may be in use to record another video on it. To avoid this problem, it is planed to use the C bit of the cassette to recognize 4 channel or 8 channel audio recording. If the AJ-HD2700P detects the 8 channel audio, eject the tape automatically.



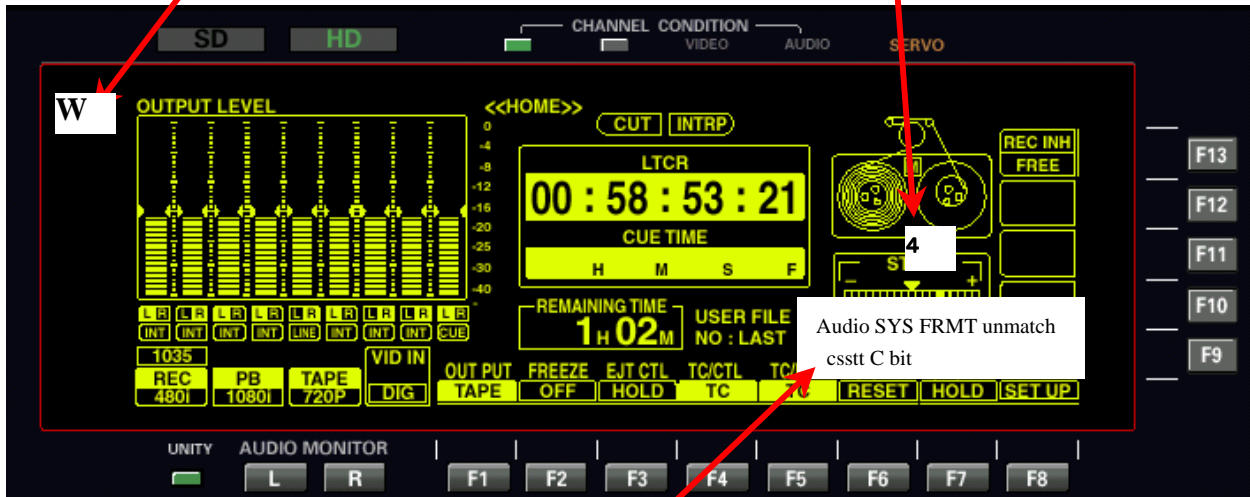
Please be noted for tape use.

1. In 8ch format record, push down the cassette C bit before using the tape.
2. When the SYSTEM setting and the C bit are different, recording is inhibited and warning message appears and C bit number is blinked on the front panel cassette animation.
3. Warning appears for 23p, 24p, 50I 8 channel tape when the C bit does not match the system, but playback is possible.
4. The Editing is inhibited if the 4 channel and 8 channel are mixed to avoid frame rate mixing.

Messages on front panel

Warning

It blinks when System and C bit do not match.



Warning message appears when recording is selected with the system and C bit matche.

The 4ch or 8ch is detected by the cassette C bit, and the following table shows the VTR operation in detection.

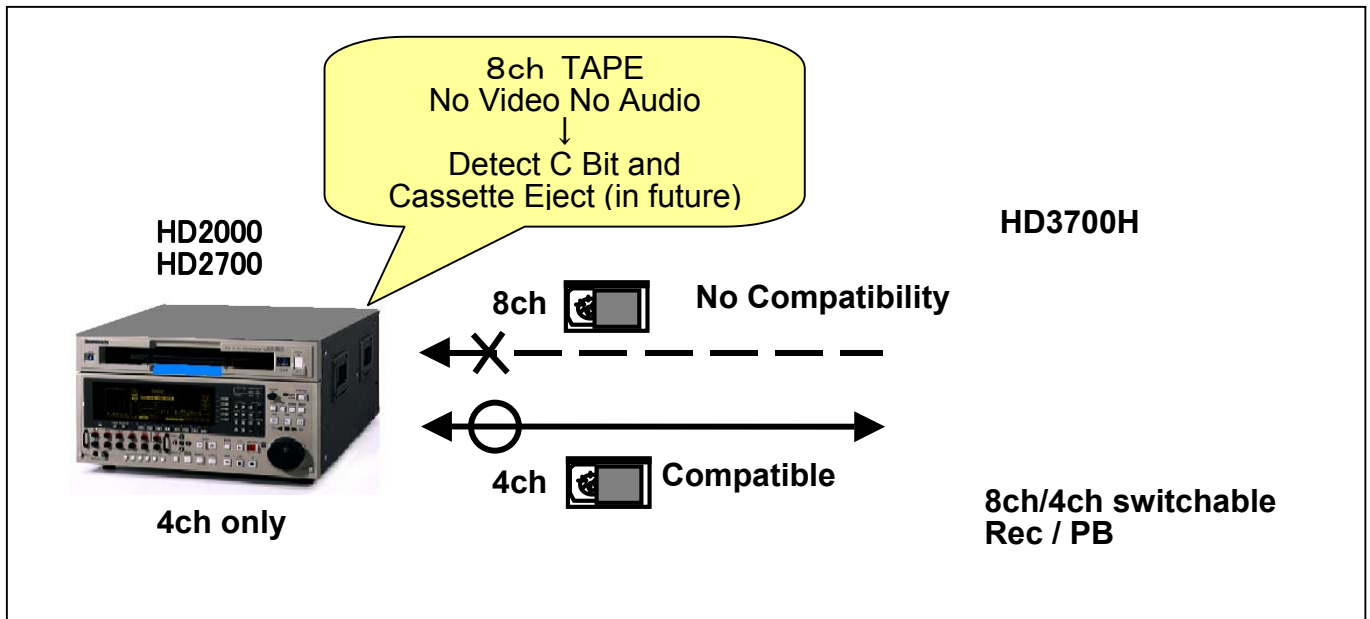
<Record mode>

CASSETTE HALL POSITION	VTR SYSTEM FORMAT	Model	
		AJ-HD2000/HD2700	AJ-HD3700H
			4ch REC mode
			8ch REC mode
Down (8ch)		Cassette Eject	Warning REC Inhibit
Up (4ch)		4ch REC	Warning REC Inhibit

<HD3700H Auto Play>

CASSETTE HALL POSITION	RECORDING FORMAT	8ch Recorded tape	4ch Recorded tape
		8ch Play	Warning REC Inhibit
Down (8ch)		8ch Play	Warning REC Inhibit
Up (4ch)		Warning REC Inhibit (No Audio, No Video, but 23.98psf, 24.00psf and 50I format can play video and audio)	4ch Play (No picture, No audio)

The PCM audio compatibility between 8ch/4ch formats



The tape format information is displayed on the menu screen after inserting the cassette tape. Format information is recorded at the 9 line on video signal. It's information signal is picked up from PB Head to detect tape format.

If cassette hole C is set to down(8ch) position in spite of 4ch recorded tape, video and audio signals can not be output. And the warning mark "W" is displayed at left-upper corner on front display.

When the tape is inserted into VTR, tape goes to loading mode and CTL Head detects CTL duty. The VTR can detect 4ch or 8ch format by CTL duty(6:4 is 4ch and 7:3 is 8ch). Also VTR detects 4ch or 8ch format by hole C condition. If the VTR detect 4ch format by CTL duty in spite of hole C which is down(8ch) condition, warning mark "W" is displayed at left-upper corner on front display.

NOTE: CTL duty is used only for warning detection of audio format .

14-2-2. PB VIDEO signal

The played CH0 to CH3 signals are supplied from EQ circuit.

Since AV PB IC can process 2ch data, the PB ASSIST IC (IC3070) is added for another 2ch. CH0 and CH1 signals are converted S/P by AV PB IC, and CH2 and CH3 are converted S/P by the PB ASSIST IC. These parallel data are sent to EE3/VV SEL IC. When the EE3 mode is selected, EE3 signal is output.

The signal from EE3/VV SEL IC is sent to PB SUB PC board. PB SUB PC board is added because AV PB IC can not process the Inner DEC of the 8ch Audio. The INNER DEC process for both video and audio are done in PB SUB PC board. Audio data is sent to AUDIO PROCESS circuit and Video data is sent to AV PB IC. The internal process is same as D5 except INNER ECC DEC and OUTER ECC DEC.

The PB DATA from AV PB IC is sent to FRAME SLOW IC (IC3035). FRAME SLOW IC has 3 FRAME MEMORY ICs. The memories stored the field video and output as frame style. This is done because of the number of D5 track. Therefore track ID detection is done.

The VPB 27M and 36M CLK are supplied to FRAME SLOW IC from L2 board. Note that HD clock rate is changed in the mode, HD 59I uses 36M, 23P uses 29M and 50I uses 30M.

The output data from FRAME SLOW IC are sent to EE1/VV SEL IC. EE1 DATA is supplied to EE1/VV SEL IC. EE1 DATA from REC PLD IC is sent to DELAY FIFO. DELAY FIFO is composed of LINE memory and 2 of FIELD memories. The delay is changed in HD or SD mode. SD EE1 data are composed of Y (upper 8 bit) and C (lower 2 bit), HD EE1 data are composed of Y (upper 8 bit) and C (lower 2 bit), and they are delayed 1 frame to match the timing with the VV data.

14-2-3. REC AUDIO Signal

The SIN AUDIO data from S5 board and AES/EBU data from the Rear Jack are supplied to REC PLD and they are selected by AUDIO IN menu.

The selected audio is supplied to DIO IC. In DIO IC, AES/EBU format audio data is converted to serial audio data. The converted serial audio data is returned to the REC PLD.

In RATE CONV IC, same as video process, the variable input clock rate data are converted to same rate. AES DLY circuit is used to delay the AES data to match the timing with the serial audio data because the serial audio data is a few samples delay from AES.

Analog audio input signal which is converted to digital is supplied to REC PLD (IC4041) from S3 board. The audio data is supplied to AV REC IC through DLY circuit in REC PLD to adjust the timing between analog audio and digital audio.

There are 4 channels of analog audio, but there are 8 channels of circuit. Therefore CH12 are supplied to CH56 lines and CH34 are supplied to CH78 for recording.

AV REC IC selects the analog or digital input.

The selected data is supplied to ACNT IC. ACNT IC has INT SG, and input data or INT SG is selected. Then the signal is separated to 2 ways and one of them are sent to the PB circuit as INPUT CHECK signal. INPUT CHECK is available only for monitor OUT.

Recording level is controlled by REC VR. REC DLY is used to adjust the AV timing. 3V DELAY circuit is used to make the EE3 for preview in editing mode. This works in EDIT REC only. Then the recording data is supplied to AV REC IC. On the other hand, FADE and D MIX playback data are supplied through DLY for REC/PB timing adjust, CH MIX, FADE and mixed with the VIDEO DATA.

14-2-4. PB AUDIO signal

The audio data (CH01 and CH23 PB S) from Video playback circuit are multiplexed CH02 and CH13 by the CH MUX and FIFO (CH MIX). Because the INNER process requires the order of CH01, 23 and the OUTER process requires the order of CH02, 13.

The CH0 through 4 are supplied to PCM PB SUB PC board and CH5 through 8 are supplied to D5 JOG SUB PC board.

On PCM PB SUB and D5 JOG SUB PC board, after deshuffling and OUTER ECC DEC process, slow audio process is done.

The signal (or data) from the SUB PC board are separated to REC circuit of AV REC IC to EE1 SEL circuit which is main. The audio EE1 data is supplied to playback circuit which is before REC VIDEO mixing.

The playback audio data is delayed by PB DLY to adjust the Audio and Video playback timing. Then it is supplied to playback and input check select circuit (SEL). The MONI MIX circuit is used to mix the two out of ch1 to ch4 for L and two out of ch1 to ch4 for R. In the 8ch Audio system, the MONI MIX can select two out of the ch5 to ch8 for L and R.

The audio outputs are separated two ways, one for Monitor output (MONI1234 & MONI5678) and the other is for main audio output (PBOUT12 to 78).

The delay is different between analog audio and digital audio. The analog audio is delayed by DLY circuit to meet the timing with the digital audio.

The clock rate of the HD 23/24p and 50I are different from the 59I. This is compensated by RATE CONVERTER. After this the signal is converted to AES/EBU format and delayed by DLY circuit.

The AES/EBU signal goes to the REAR JACK PC board. HD/SD signal goes to SDI board (S4).

14-3. PB PROCESS board (L2)

The main functions of L2 board are as follows.

1. De-compression of the HD compression data
2. Concealment
3. HD/SD UP/DOWN Conversion
4. SYNC Generator

PB DATA from the L1 PC board is separated into 3 circuits.

In case of HD, compressed data is supplied to DE COMP.IC. There are 4 DE COMP ICs and each IC de-compress the 1/4 data (YE, YO, Pb, Pr).

The 2 dimensional concealment is done in DE-COMPRESSIC IC and the 3 dimensional concealment is done in FIFO which is connected with DE COMP IC.

The separated data A to D are multiplexed into CH SEL & OUT circuit and supplied to HD SEL & OUT circuit.

In case of SD format, since SD format data is not compressed, it does not go through DE COMP circuit. The PB data is separated to Y/C and supplied to 2D concealment IC and 2 dimensional concealment is done.

The HD and SD come to one line before VLPF.

VLPF is used for Interpolation in the variable playback mode. It is not used in the normal playback or confidence playback mode.

There are two RATE CONV circuits for Y and C.

RATE CONV IC is used in 23/24p and 50i mode. It is not used in 59i mode.

The frequency rate is converted and the output frequency becomes 74M for all modes.

The Y and C data from RATE CONV IC are supplied to UFC1 and UFC2.

Refer to HD3700H output list.

FREQ	VIDEO	AUDIO	HD SDI OUT	HD MONI OUT	SD SDI OUT	SD MONI OUT	CMPST	Remarks
59.94	1080I	4ch or 8ch	1080/59.94I	1080/59.94I	525I	525I	NTSC	
	720P	4ch or 8ch	720/59.94p	720/59.94p	525I	525I	NTSC	
					525p	525p	NTSC	
	525I	4ch	1080/59.94I	1080/59.94I	525I	525I	NTSC	
23.98	1080psf	8ch	1080/23.98psf	1080/23.98psf	525I	525I	NTSC	
				1080/59.94I	525p	525I	NTSC	
			1080/59.94I	1080/59.94I	****	****	****	BLACK
					525I	525I	NTSC	
			720/59.94p	720/59.94p	525p	525I	NTSC	
					525I	525I	NTSC	
			1080/24psf	1080/24psf	525I	525I	NTSC	
				1080/60I	525p	525I	NTSC	
24	1080psf	8ch	1080/24psf	1080/24psf	****	****	****	Out of the specification
				1080/60I	****	****	****	BLACK
			1080/60I	1080/60I	****	****	****	Out of the specification
					****	****	****	Out of the specification
50	1080I	8ch	1080/50I	1080/50I	625I	625I	The PAL	

 Signal is converted on UDC board(UFC2).

 Signal is converted on L2 board(UFC1).

BLACK : UP/DOWN CONV can convert only one format. When the 1080/23.98psf signal is converted to 1080/59.94I, SD output is not supplied.

Note : When 1080/24 mode is converted to 59.94I, the picture can be seen in 60 mode, but it is out of the specification.

******** : The mark “****” appears on the menu, when output signal can’t or isn’t be supplied.

AJ-UDC3700 can convert from HD to SD or from SD to HD as shown as above table. If the 1080/23p signal is converted to 1080/59i, there is no SD output. Because AJ-UDC3700 is used for format conversion.

UFC1 and UFC2 share the conversion. The sharing is shown on the above table.

The yellow marked format is output from UFC1. The cyan marked format is output from UFC2.

Analog composite signal is made from SD signal on S4(SDI OUT) board. Therefore analog composite signal output can’t be supplied without SD signal supplied to S4 board.

Regarding 23p and 24p playback, when 24p recorded tape is played under 1080/23P SYSTEM format setting, 23p signal is output. And when 23p recorded tape is played under 1080/24P SYSTEM format setting, 24p signal is output. Therefore when 23p or 24p tape is played, output signal format is depending on the setting of SYSTEM SETUP menu.

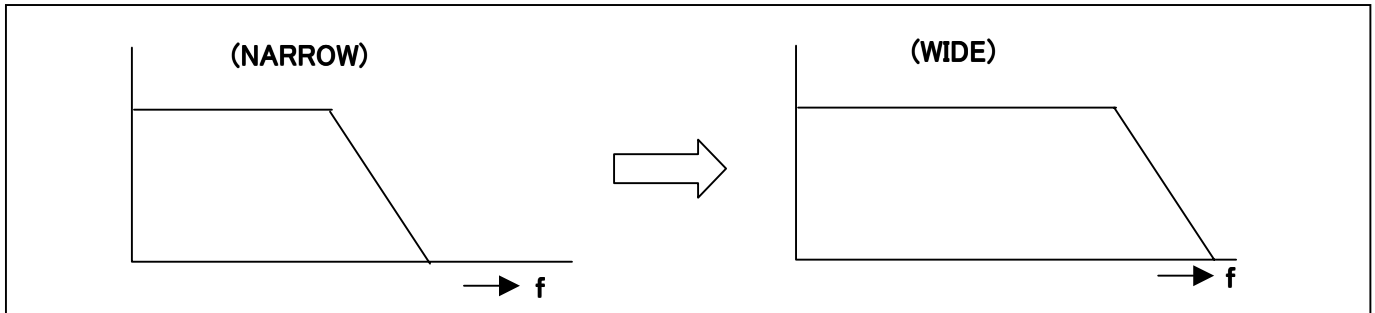
If case input signal frequency is the same as format setting on SYSTEM SETUP menu, HD REF is effective. If different, it is in internal free-run mode in spite of HD REF signal input.

If case OUTREF is set to AUTO on HOME SETUP menu, with both HD REF and SD REF signal input, "DUAL REF" is displayed on front display.

To select frequency response, there are selection of WIDE, STANDARD or NARROW in item F2 (RESPONSE) of "VIDEO OUT CONVERT HD TO SP", "VIDEO OUT CONVERT SD TO HD" and "VIDEO OUT CONVERT HD TO HD" menu.

Therefore "RESPONSE" and "ENHANCE" on CONVERT menu to adjust output picture as user wants at the HD to SD conversion or HD to HD conversion.

In case "RESPONSE" is set to wide, high frequency band width becomes wider and picture will be sharper.



The item "ENHANCE" has 4 setting values 0, 1.5, 3.0 and 6.0, to enhance middle frequency level. And higher value makes the level higher. If detail of picture is changed to higher level, ringing may cause.

According to menu selection, UFC1 or UFC2 is selected by OUTPUT SELEC IC. The selected data is supplied to HD, HD MONI and SD output.

HD and SD data are converted from parallel to serial and go to SDI (S4) board. HD serial is 20 bit and SD serial is 10 bit.

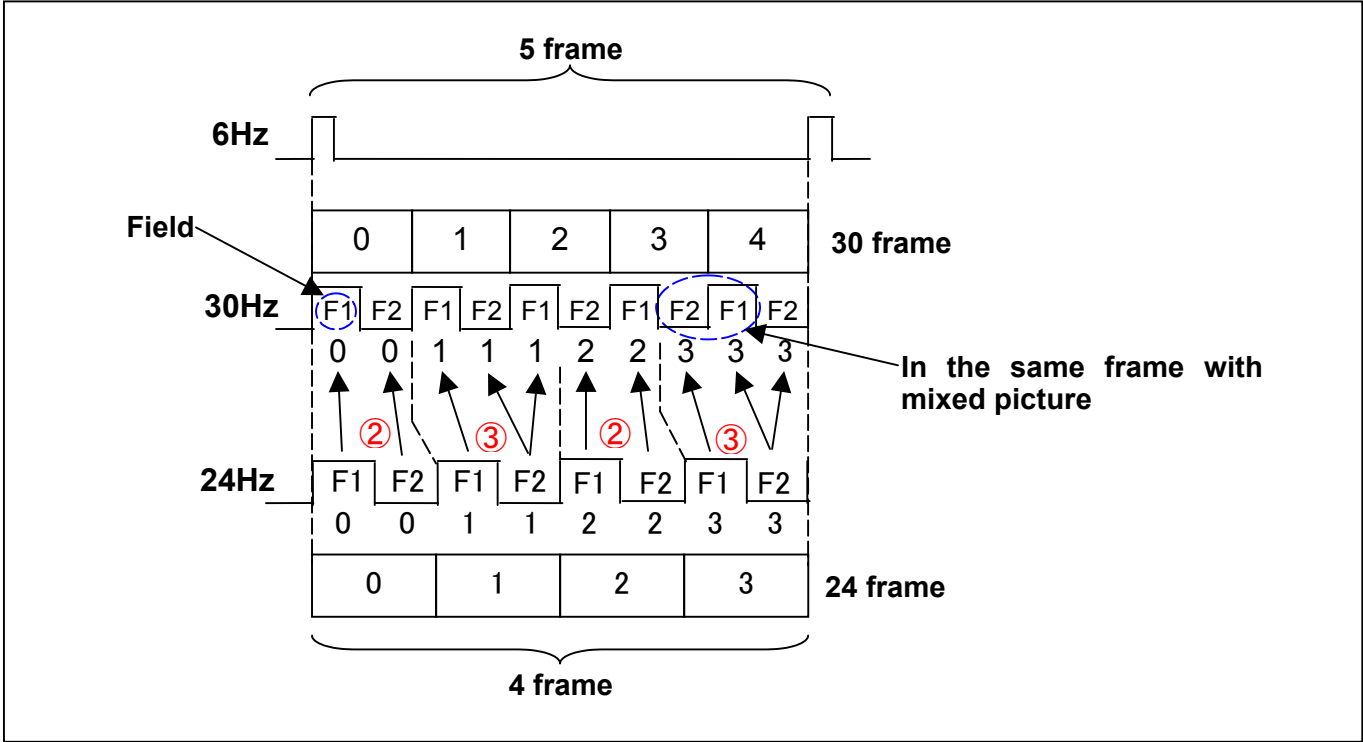
META data is processed in META SEP IC. META data is extracted in only HD input mode. And this META data is mixed at the output circuit.

SYNC GEN circuit is located on L2 PC board. SD REF or HD REF is supplied to this board. Reference clock which is used for each board is generated on L2 board.

<For your reference: 3 to 2 pull down>

3:2 pull down means conversion from 24 frame to 30 frame when the 23p/24p mode is converted to the 59I mode (It is also called as 2:3 pull down, too).
 Because movie is in 24 frames per second, it needs to be converted to 30 frames when it is recorded by VTR.
 The time code is also 30 frames 0 to 29, it needs to be converted from 0 to 23 in case of 24p.

Following is explanation of the principle for converting from 24 frames to 30 frame.



The GCD (the gratest common divisors) of 30 and 24 is 6 Hz. In the the 3:2 pull down, they convert 4 frames to 5 frames. The 4th frame of 24p and 5th frame of 30 (60I) are matched. The way of the order is fixed and the initial sequence is assigned to F1 and F2. The next sequence is assigned to F1, F2, F1 as 3 field. The name of 2:3 pull down is come from above sequence. Because it is mixed field as the picture, it may show some difference on picture. However, it may not be recognizable level for VHS.

Some customers may accept this. To avoid this, time code sync point is used for editing. The sync point is set on the time code convert menu. But picture of sequence is set by number of frame as input time code.

Frame number	0	1	2	3	4
24Hz	AA	BB	CC	DD	AA
30Hz	AA	BBB	CC	DD	AA

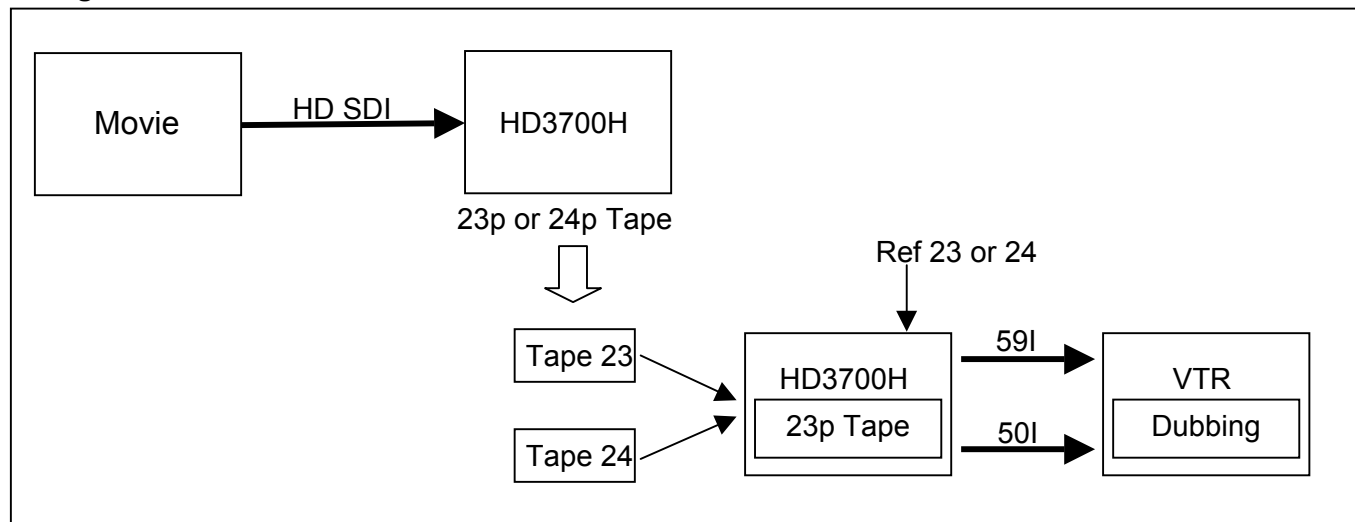
In case enter 0 frame of time code value: from sequence A
 In case enter 1 frame of time code value: from sequence B
 In case enter 2 frame of time code value: from sequence C
 In case enter 3 frame of time code value: from sequence D
 In case enter 4 frame of time code value: from sequence A

When the film is converted Video, it is converted from 24 to 30. But opposite conversion is impossible by AJ-HD3700. But AJ-UFC1800 can convert it.

In the film market, the master tape must be 24 frames and 60i is not sufficient for customers. Therefore from 60i to 24p is not necessary. Because the conversion from 60i to 24p does not have master quality, AJ-HD3700 is not required for this function.

In PAL mode, faster tape speed gives a normal PAL output without 3:2 pull down.

<Image of the telecine>



The 23p recorded tape can be played as 24p, and 24p recorded tape can be played as 23p. But it can not output 24p while 23p recording. Care must be taken about this point.

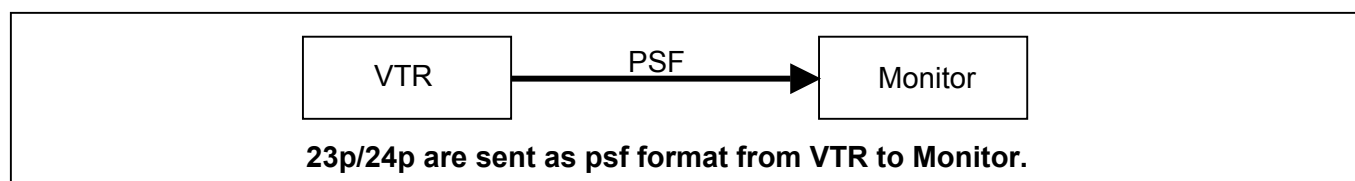
DF and NDF are still remaining for HD VTR.

No DF and NDF setting in 23p mode by this VTR. Therefore in only 59.94 mode set on SYSTEM SET UP menu, DF/NDF selection appears on TC/CHR menu. And item of DF MODE on TC/CHR CONVERT menu is selection, whether setting DF or NDF to converted time code from 23.98 to 59.94.

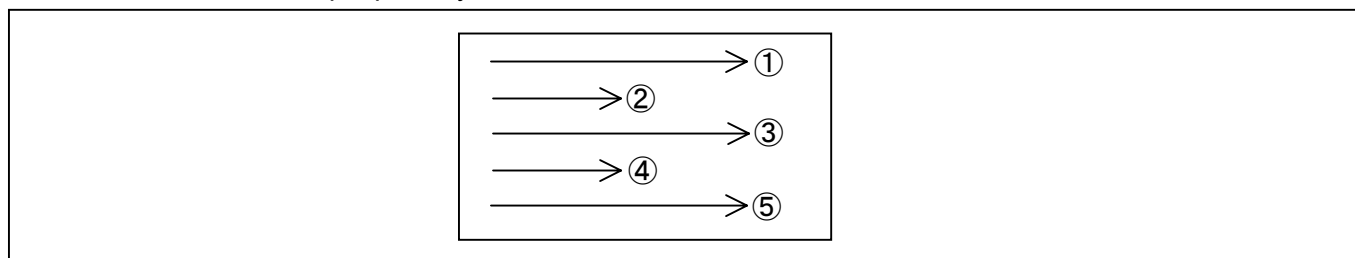
<For your reference: PSF (Progressive Segment Frame)>

In the 1080/23p and 24p modes, the output format is psf. Therefore, in the operating instruction, it is written as 23p (23.98psf), 24p (24psf) as for specification.

PSF is a progressive segment frame. This is outputting the signal of 24p as a the signal of 48i from VTR to the monitor.



In 24p mode, scanning of picture goes from top to bottom, but in 48I mode, it is interleaved. This is done because the monitor accepts psf only.



14-4. The SDI OUT PC board (S4)

The HD SDI outputs are made from HD MAIN and HD MONI signals. The signals are supplied from L2 board. Note that the HD MAIN and HD MONI are not always same signals. If the signals are different, the clock rate is also different. Therefore the circuit must be different.

It must be 20 lines for HD signals, but with LVDS, it requires only 8 lines.

There is another merit of LVDS. LVDS is strong for noise. In some case extension board may cause the latch mistake. But the LVDS does not have latch error with it.

The HD SDI is converted from serial to 10-bit Y and C parallel data. Then they are supplied to HD SDI TX PC board. HD monitor circuit adds the superimpose data after S/P conversion, then the data is supplied to HD SDI TX PC board.

The embedded audio is supplied from L1 board. The AV timing is adjusted by the FIFO. The audio and video are mixed in ENCODER IC on HD SDI TX board. Then the data is converted from parallel to serial and HD signal is output. There are 3 main outputs and 1 monitor output.

NOTE: HD SDI TX board is used in the following models.

AJ-HD130、AJ-HD150、AJ-HDC20、AJ-HDC27、AJ-HDP151、AJ-UFC1800

SD signal is supplied from L2 board as 10 bit parallel data. VITC signal is mixed with SD signal and supplied to SD ENC IC, then SD audio data is multiplexed. The data is delayed (FIFO) to adjust the timing with HD. The signal is P/S converted and output 2 ways. In SD monitor circuit super impose is mixed.

Superimpose IC supplies SD and composite data. There are 2 composite outputs and only the Video Out 3 has superimpose.

After mixing, composite data is output 2 ways. Video out3 has superimpose.

Analog output is D/A converted with superimpose. The sync is replaced, but the super impose are mixed before D/A.

The INPUT CHECK Circuit

The INPUT CHECK signal is supplied from S5 PC board. In HD mode, HD signal is supplied to input check circuit. Therefore only HD is monitored in input check mode when HD mode is selected.

In SD mode, SD is supplied to super add IC. The input check signal is supplied to SD MONITOR OUT only.

15. The checkpoint after specified detective

P.C.Board(S5/S4/L2/L1)

When a problem occurs on a picture, if defective P.C.Board could be either L2, S4, S5 board or L1 board, refer the following explanation since it shows which point should be confirmed on each board.

15-1. S5 (SDI IN)

15-1-1. In case of picture problem with HD input.

1. Confirmation in INPUT checking circuit?

If it is OK INPUT checking circuit, the circuit till IC27 and IC29 (latch) is no problem.

In this case there might be problem in the circuit after IC85-87 (buffer) that is RATE CON and compression.

If it is NG INPUT checking circuit, there is problem in the process till IC27 and IC29 (latch).

HD input signal goes to IC27, 28, 29 after it is decoded in HD_SDI_RX board. Then it goes to S4 board through P/S conversion.

P/S IC in INPUT CHECK process is IC31 for HD and IC30 for SD.

2. Confirmation with INT SG

If only the INPUT circuit is NG with HD signal input, IC27-29 is OK. There is problem in the circuit till IC20, 23 and 25(SEL) (HD SDI RX board).

3. Confirmation with other frame frequency?

If it is OK in 59I mode but NG in 23/24P and 50I mode, there might be problem at RATE CONV or in the circuit around it which might be IC85-87(buffer) or IC92-94(SEL).

In the CLK system, if CLK is supplied from IC97 (the 58M generation) or not.

4. Is it block noise?

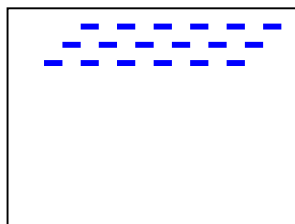
If the picture problem isn't block noise, the circuit before 36M system of the compression might be NG (RATE CONV., 4 CHIP DRIVER).

Compression IC A through D meets each channel accordingly.

5. Is the block noise in line or random?

If the block noise is (the diagonal direction) in line on the screen as shown in the following figure, 1 channel out of four compression ICs (A-D) is NG.

To specify which channel is problem, short-circuit among address pins of SDRAM for each compression IC. Then confirm is problem picture overlap on NG block or not.

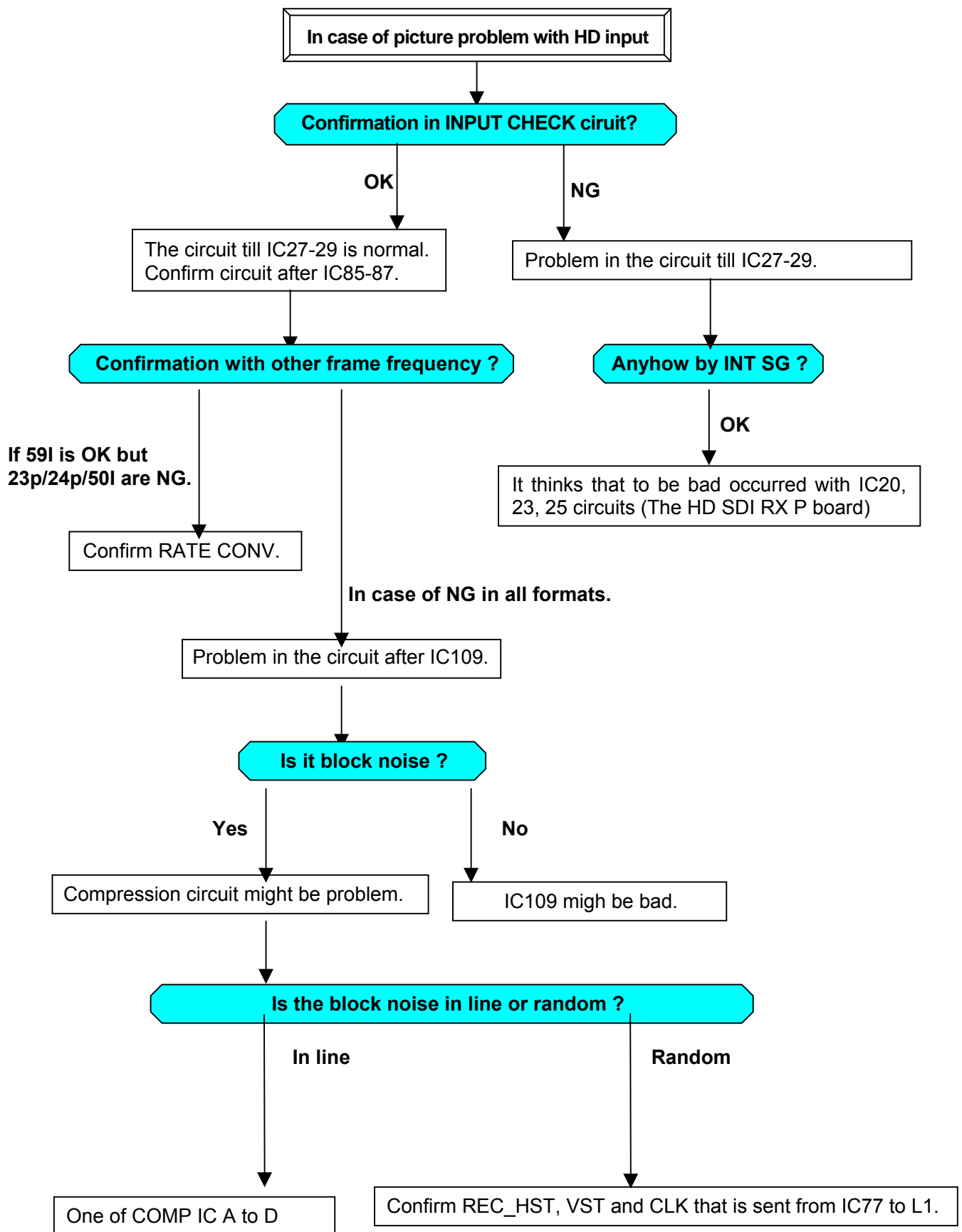


If the block noise appears randomly, confirm REC_HST, VST, and CLK to be sent from IC77 to L1.

6. Confirmation difference between with HD INPUT and without it

In case of no input, it works with INT SG block signal upon REF (CLK, H, F) from L2 as reference. HD reference signal from HD input signal is HD_DEC_HD, VD, FRM signal from decoder of HD_SDI_RX board and these reference signals are applied to SGEN(IC77).

15-1-2. Flow chart of confirmation procedure for the picture problem with HD input.



15-1-3. In case of picture problem with SD input.

1. Confirmation in INPUT checking circuit

If it is OK in INPUT checking circuit, the circuit till IC27-IC29 (latch) is no problem.

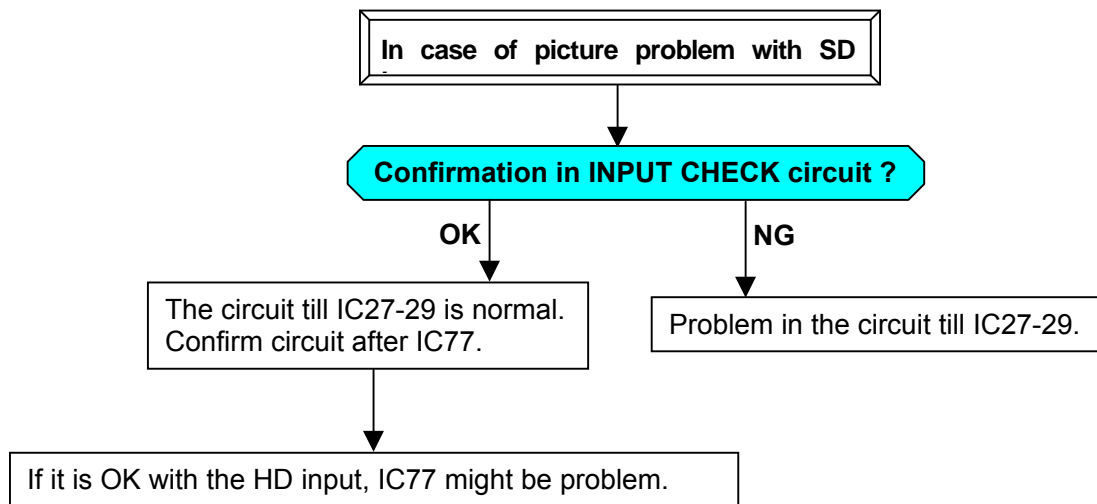
In this case there might be problem after IC77. If HD input is OK IC77 might be problem.

If it is NG in INPUT checking circuit, there is problem in the process till IC27-IC29 (latch).

SD input signal goes to IC27, 28, 29 after it is decoded in IC64. Then it goes to S4 board through P/S.

P/S IC in INPUT CHECK process is IC31 for HD and IC30 for SD.

15-1-4. Flow chart of confirmation procedure for the picture problem with SD input.



15-2. S4 (SDI OUT)

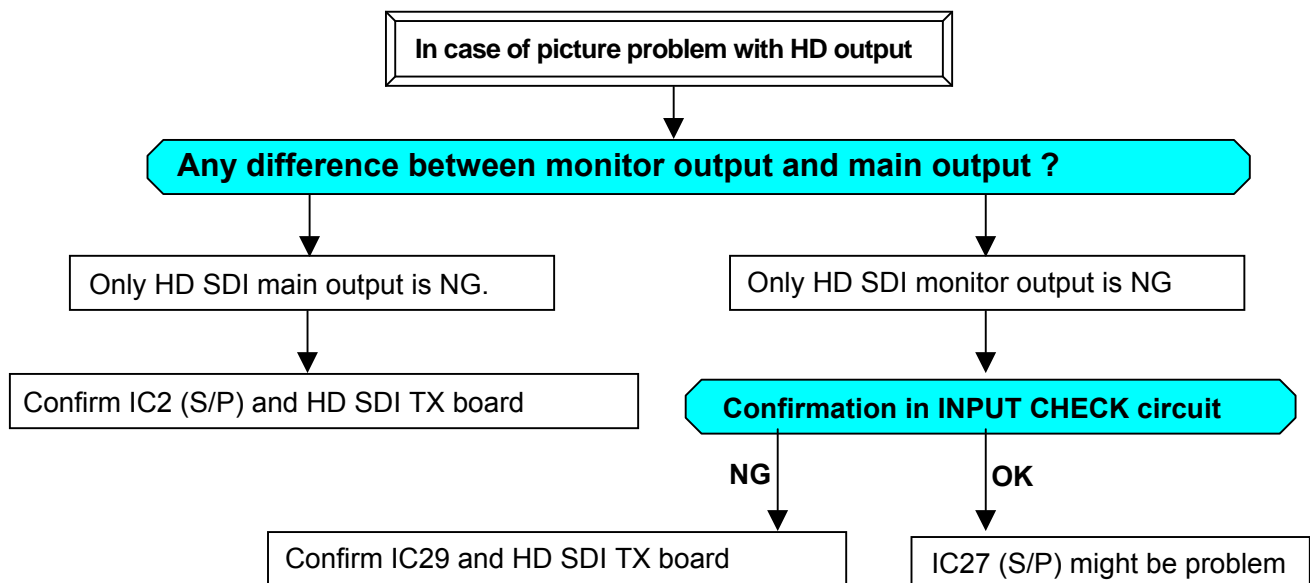
15-2-1. In case of picture problem with HD input.

1. Any difference between monitor output and main output ?

If only the HD SDI main line is NG, IC2 (S/P) HD SDI TX board might be problem.

When only HD SDI monitor system is NG, if INPUT CHECK is OK, IC27 (S/P) might be problem. And if INPUT CHECK is NG, IC29 (CHAR GEN) and/or HD SDI TX board might be problem.

15-2-2. Flow chart of confirmation procedure for the problem picture with HD output.



15-2-3. In case of the SD output picture problem.

1. Any difference in monitor output and main output ?

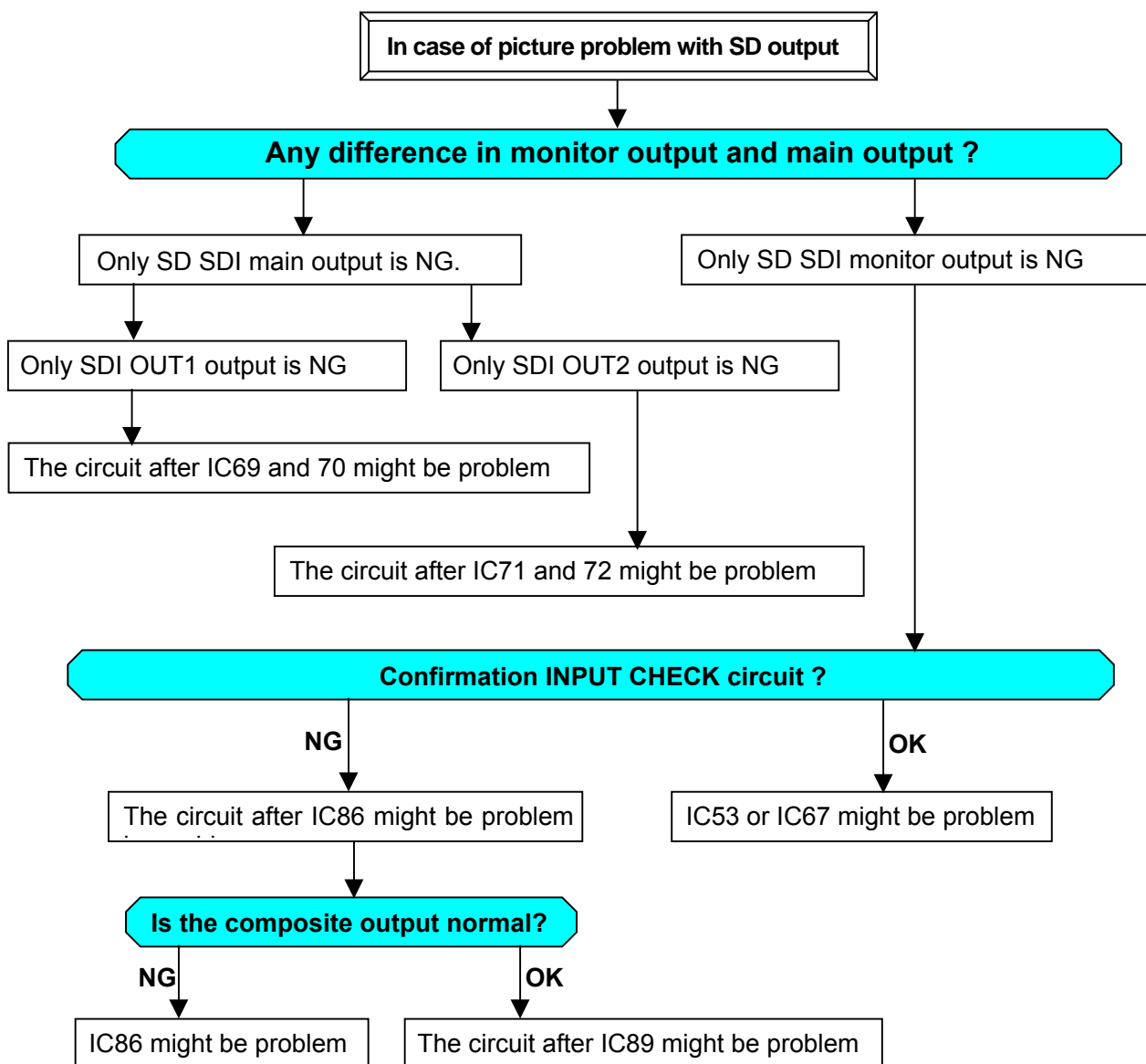
If only SD SDI main circuit is NG, circuit after IC69 and 70 might be problem for SDI OUT1 and after IC71 and 72 might be problem for SDI OUT2.

If only SD SD1 monitor circuit is NG, IC53 (SD MUX) or IC67 (SD MUX) might be problem with INPUT check NG. INPUT CHECK is OK, circuit after IC86 (SD CHAR GEN) might be problem.

2. Is SD composite, different from SD-SDI out ?

If only composite output is NG in SD OK, Confirm circuit of VIDEO OUT1,2 and 3.

15-2-4. Flow chart of confirmation procedure for the picture problem with SD output.



15-3. L2 (PB PROC)

When the problem related with L2 board occurs, it must be confirmed if it related to either video signal process or CLK circuit. Also, if it is related to video signal process, it must be confirmed if it is block noise or dot error.

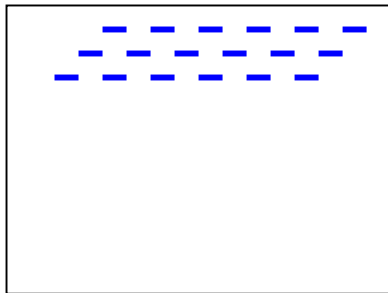
Is it picture problem or synchronization problem ?

15-3-1. Video Problem

1. In case of the block noise.

When the block noise is in line (the diagonal direction) on screen, it must be specified which channel has an error and the block noise.

To specify a channel, set INT SG to MULT-BST and 25 pins and 26 pins of IC140(A-ch), IC147(B-ch), IC154(C-ch), IC161(D-ch) should be short-circuited with the probe. Then with this condition block error is occurred. And confirm if this block error will be overlapped or not.



When Ach is an error

When the block error occurs to the whole channel only in either the field, problem might occur any (a), (b), (c) as follows.

- (a). IC140 or IC141 (SDRAM)
- (b). IC142 or IC143 (SDRAM)
- (c). The data between compression IC (IC138) and the memory IC or the foil of the address is broken.

In case of the partial block noise appear on screen, internal memory might be bad of the compression IC.

2. In case of the dot error

If HD and SD output picture have problem in HD mode, input/output data line of IC182, IC183, IC185, IC191 or IC itself may be problem.

If only HD output picture has problem in HD mode, input/output data line of IC208, IC227, IC192 or IC itself may be problem.

If only SD output picture has problem in HD mode, input/output data line of IC227, IC240, IC241, UDC board or IC itself may be problem.

If HD and the SD output picture have problem in SD mode, input/output data line of IC133, IC136 or IC itself may be problem.

15-3-2. Synchronization problem

1. Synchronization problem of picture system

Synchronization problem with OUTREF to SD REF, 4FSC PLL circuit might be problem.

Synchronization problem with OUTREF to HD REF, the IC19, IC77 SYNCSEP circuit might be problem.

Synchronization problem with OUTREF to any reference, IC51, 74MPLL or 27MPLL circuit might be problem.

2. Synchronization problem in servo system

If a servo system is in problem, the signal SV HSW, SV FV(2,4,8) from SYNC GEN(IC51) may not be output.

3.The error message of AV NOT RESPONDING is displayed

When AV NOT RESPOND error comes out with turning power on, if is related to L2, this error is displayed without signal of REF HD F, REF HD H, REF CLK74 from IC51.

15-4. L1 (D5 REC PB)

15-4-1. Recording Problem

Is video problem or audio problem ?

1. In case of only video recording problem .

Confirmation between EE1 and EE2 in VTR STATE

In case EE1 and EE2 are NG, IC3009 (LATCH) or IC3017 (REC V PLD) might be problem.

In case EE1 is OK but EE2 is NG, circuit after AV REC IC (REC SUB PC board) might be problem.

In case both EE1 and EE2 are OK, IC3604 (P/S), IC3606, 7(TRIPLE LINE RECEIVER) on REC SUB board might be problem.

Any difference with other frequency

Is CLK output from the CLK generation circuit according to the frequency rate.

REC CLK is output from the IC3052-12 pin and is supplied to REC AMP board.

•X3001: 115MHz (23/24p)

•X3002: 120MHz (50I)

•X3003: 143.7MHz (59I8)

•X3004: 133MHz (59I4)

2. In case of only audio recording problem.

Is INPUT CHECK INT SG OK?

If it is OK, there may be problem in the circuit till IC4118(ACNT: CH1-4), IC4121(ACNT: CH5-8).

If it is NG, there may be problem in the circuit after IC4118(ACNT: CH1-4), IC4121(ACNT: CH5-8).

Is it OK even if REC SUB board's changed?

If it is OK and if the analog audio IN is NG, IC4041(REC PLD) might be problem.

If it is OK and if AES IN, SDI IN are NG, the circuit till IC4041(REC PLD) might be problem.

If it is NG, IC3200(AV REC IC) on REC SUB board might be problem.

Any difference in changing STATE of the VTR to EE1(AUDIO EE1)?

If it is OK, IC4118(ACNT: CH1-4), IC4121(ACNT: CH5-8), IC4041(REC PLD) might be problem.

If it is NG, IC3200(AV REC IC) on REC SUB board might be problem.

3. In the case of both video and audio recording problem.

Any difference in changeing STATE of the VTR to EE2?

If EE2 is OK, IC3604(P/S), IC3606, 7(TRIPLE LINE RECEIVER) on REC SUB board might be problem.

If it is NG, IC3200(AV REC IC) on REC SUB board might be problem.

SECTION 2

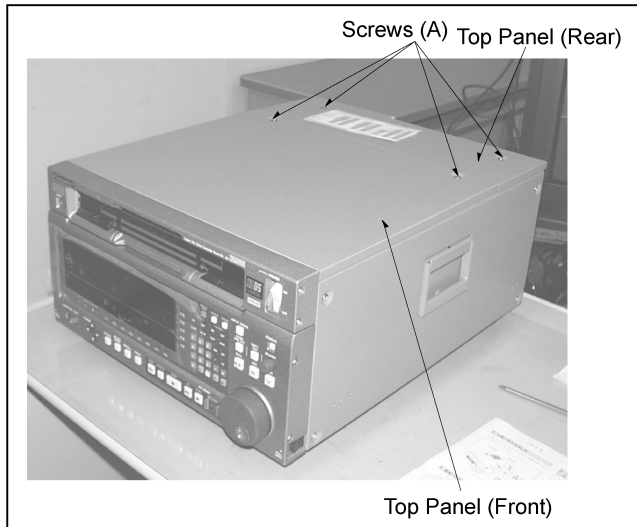
DISASSEMBLY PROCEDURES

CONTENTS

1.	Removal of Top Panel	DIS-1
2.	Removal of Bottom Panel	DIS-1
3.	Removal of Front Loading Unit	DIS-1
4.	Removal of Power Supply Unit.....	DIS-2

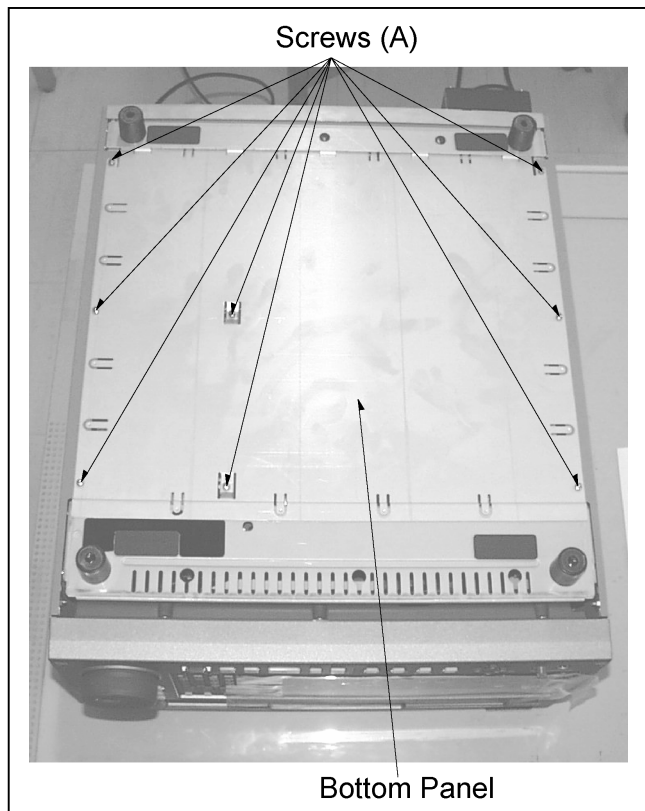
1. Removal of Top Panel

1. Loosen 4 screws (A) and remove the Top Panels (Rear and Front) as shown below.



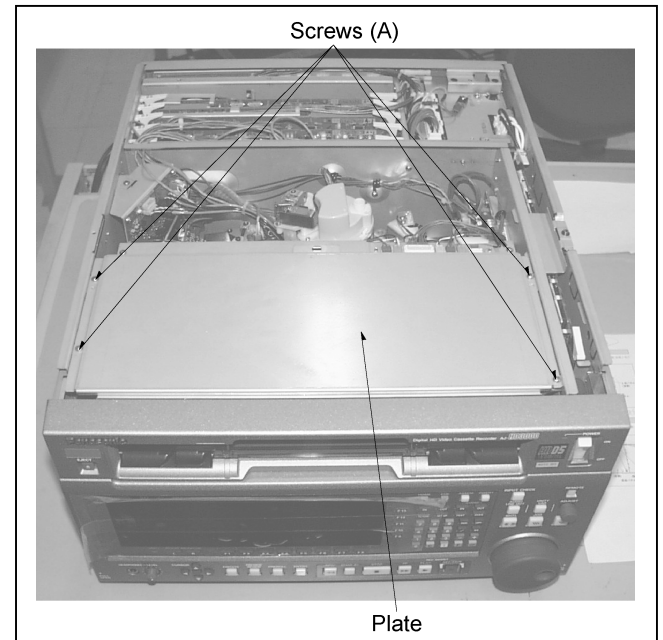
2. Removal of Bottom Panel

1. Remove 8 screws (A) and remove the Bottom Panel as shown below.

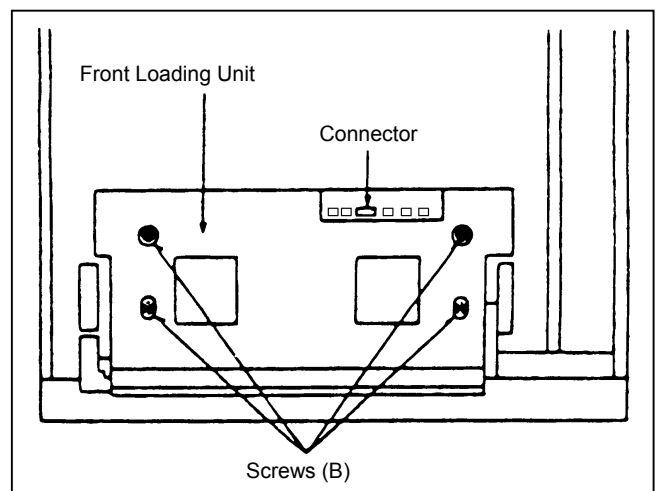


3. Removal of Front Loading Unit

1. Remove the Top Panel.
2. Remove 4 screws (A) and remove the Plate as shown below.

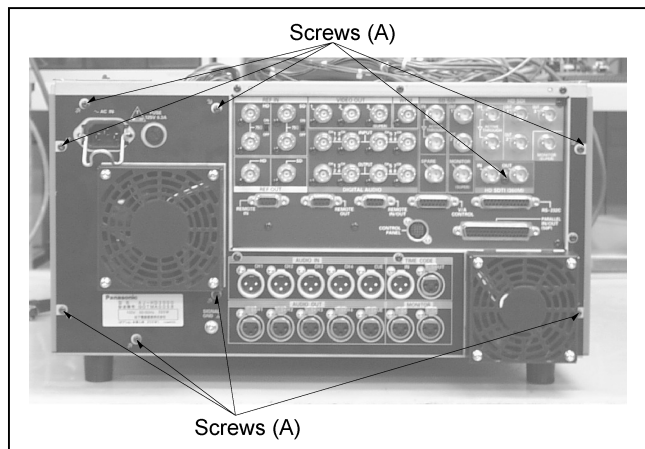


3. Remove the 4 screws (B) and disconnect the connector as shown below. Then pull up the Front Loading Unit to remove.

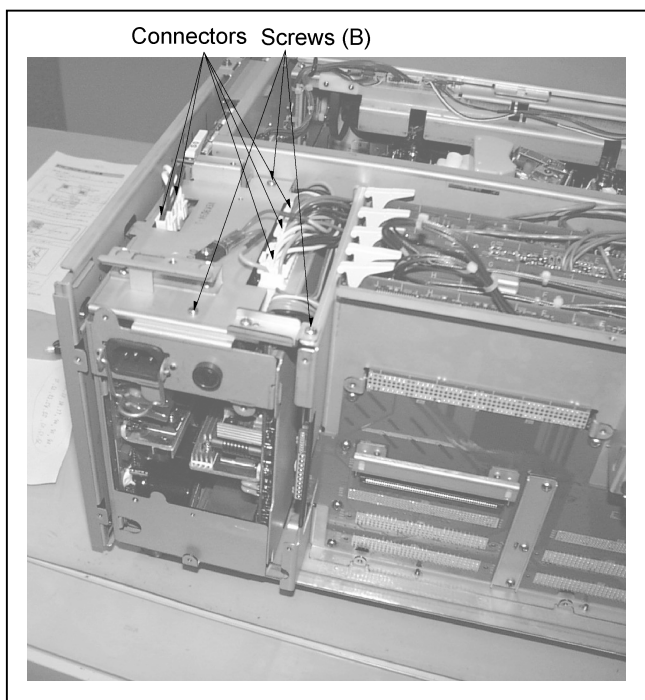


4. Removal of Power Supply Unit

1. Remove 9 screws (A) and remove the Rear Panel.



2. Remove 3 screws (B) and disconnect 5 connectors as shown below. Then pull out to remove the Power Supply Unit.



SECTION 3

MECHANICAL ADJUSTMENT

CONTENTS

Notice in use of Alignment Tape.....MEC-1

1.TAPE TRANSPORT ADJUSTMENT

PROCEDURES.....MEC-2

1. NAME OF TAPE TRANSPORTATION.....MEC-2

2.POST HEIGHT PRE-ADJUSTMENT

(FACTORY ADJUSTMENT).....MEC-3

3.INCLINED ANGLE CONFIRMATION & ADJUSTMENT of P3 AND INCLINED POST.....MEC-4

3-1. CONFIRMATION OF P3 POST INCLINED ANGLE
.....MEC-5

3-2. CONFIRMATION OF INCLINED POST
INCLINED ANGLEMEC-5

3-3. P3 POST INCLINED ANGLE ADJUSTMENT
.....MEC-6

3-4. INCLINED POST INCLINED ANGLE
ADJUSTMENT(1)MEC-7

3-5. INCLINED POST INCLINED ANGLE
ADJUSTMENT(2)MEC-7

4.CONFIRMATION AND

ADJUSTMENT OF TENSION.....MEC-8

4-1. TENSION METER CALIBRATIONMEC-8

4-2. TENSION ADJUSTMENT METHODMEC-9

4-3. SENSOR AMP GAIN ADJUSTMENT.....MEC-9

4-4. SENSOR AMP OFFSET ADJUSTMENTMEC-10

4-5. SUPPLY SENSOR VOLTAGE ADJUSTMENT MEC-10

4-6. LOADING TORQUE ADJUSTMENTMEC-11

4-7. SUPPLY TENSION ADJUSTMENTMEC-11

4-8. FWD TORQUE ADJUSTMENT AND
T REV TENSION CONFIRMATIONMEC-12

5.CONFIRMATION OF HEAD PROTRUSION ...MEC-13

6.CENTER DRUM REPLACEMENT &

ADJUSTMENT PROCEDURE.....MEC-15

6-1. CENTER DRUM REPLACEMENT
PROCEDURE.....MEC-16

6-2. ECCENTRIC ADJUSTMENTMEC-19

6-3. PARTS INSTALLATION AFTER CENTERING
ADJUSTMENT.....MEC-21

6-4. RF ENVELOPE LINEARITY AND TAPE
TRANSPORTATION ADJUSTMENTMEC-22

6-4-1. RF ENVELOPE LINEARITY
CONFIRMATIONMEC-23

6-4-2. UPPER DRUM ADJUSTMENTMEC-24

6-4-3. P3 POST HEIGHT ADJUSTMENTMEC-25

6-4-4. P4, P5 POST HEIGHT ADJUSTMENTMEC-26

6-4-5. P6 POST HEIGHT ADJUSTMENT MEC-27

6-4-6. A/C HEAD TILT CONFIRMATION MEC-28

6-4-7. A/C HEAD TILT ADJUSTMENT MEC-30

6-4-8. A/C HEAD HEIGHT ADJUSTMENT..... MEC-32

6-4-9. A/C HEAD AZIMUTH ADJUSTMENT MEC-32

6-4-10. CTL OUTPUT CONFIRMATION MEC-33

6-4-11. P7, P8, P9, P10, POST HEIGHT
ADJUSTMENT MEC-34

6-4-12. TAPE TRANSPORTATION POSTS
LIMIT POSITION CONFIRMATION MEC-35

6-5. LINEARITY AND HEAD HEIGHT
ADJUSTMENT MEC-36

6-5-1. LINEARITY ADJUSTMENT MEC-38

6-5-2. SPECIFICATION OF LINEARITY
ADJUSTMENT MEC-39

6-5-3. REC HEAD HEIGHT ADJUSTMENT MEC-40

6-5-4. FE HEAD HEIGHT ADJUSTMENT MEC-42

6-6. FINAL CONFIRMATION OF
LINEARITY WHEN CHANGING MODES MEC-43

6-7. FINAL CONFIRMATION OF RF ENVELOPE
LINEARITY AND WAVING MEC-44

6-8. DRUM AXIS VERTICALITY ADJUSTMENT MEC-45

6-9. A/C HEAD HORIZONTAL POSITON
ADJUSTMENT (X VALUE)..... MEC-47

6-10. A/C HEAD HORIZONTAL POSITION
CONFIRMATION (X VALUE)..... MEC-48

6-11. PG SHIFTER ADJUSTMENT..... MEC-48

7.MAJOR MECHANISM PARTS REPLACEMENT

AND ADJUSTMENT PROCEDURE.....MEC-49

7-1. GENERAL MEC-49

7-2. DRUM UNIT REPLACEMENT MEC-49

7-3. S-REEL BASE UNIT /T-REEL BASE UNIT
REPLACEMENT AND ADJUSTMENT..... MEC-50

7-3-1. REPLACEMENT PROCEDURE MEC-50

7-3-2. ADJUSTMENT PROCEDURE MEC-51

7-3-3. CASSTTE SUPPORTER HEIGHT
ADJUSTMENT MEC-51

7-4. SUPPLY BRAKE UNIT AND TAKE UP
BRAKE UNIT REPLACEMENT..... MEC-52

7-5. SUPPLY BRAKE SOLENOID AND TAKE UP
BRAKE SOLENOID REPLACEMENT..... MEC-53

7-6. PINCH ARM UNIT REPLACEMENT..... MEC-54

7-7. A/C HEAD REPLACEMENT MEC-54

7-7-1. REPLACEMENT PROCEDURE MEC-54

7-7-2.	A/C HEAD ADJUSTMENT	MEC-56
7-8.	FULL ERASE HEAD REPLACEMENT AND ADJUSTMENT	MEC-57
7-9.	POST ROLLER UNIT REPLACEMENT	MEC-58
7-10	CAPSTAN ROTOR UNIT AND CAPSTAN BEARING REPLACEMENT & ADJUSTMENT.	MEC-59
7-11.	PINCH SOLENOID AND PINCH PRESS LEVER REPLACEMENT AND ADJUSTMENT	MEC-61
7-11-1.	PINCH SOLENOID REPLACEMENT	MEC-61
7-11-2.	PINCH PRESS LEVER REPLACEMENT	MEC-61
7-11-3.	PINCH PRESS LEVER POSITION ADJUSTMENT	MEC-62
7-11-4.	PINCH SOLENOID POSITION ADJUSTMENT	MEC-62
7-12.	TENSION STRING PLATE REPLACEMENT	MEC-63
7-13.	LOADING MOTOR AND LOADING MOTOR BELT REPLACEMENT	MEC-64
7-13-1.	LOADING MOTOR BELT REPLACEMENT	MEC-64
7-13-2.	LOADING MOTOR REPLACEMENT	MEC-64
7-14.	FRONT LOADING MOTOR REPLACEMENT	MEC-65
7-15.	FAN MOTOR REPLACEMENT	MEC-66
7-16.	EJECT SWITCH REPLACEMENT	MEC-66
7-17.	POWER SWITCH REPLACEMENT	MEC-67
7-18.	IP BASE UNIT REPLACEMENT	MEC-67
7-19.	CAM GEAR REPLACEMENT AND ADJUSTMENT	MEC-68
7-20.	RING ROLLER UNIT REPLACEMENT	MEC-69
7-21.	SUB LOADING MOTOR REPLACEMENT ..	MEC-70
7-22.	STOPPER SOLENOID REPLACEMENT AND ADJUSTMENT	MEC-70
7-23.	WORM MOTOR UNIT REPLACEMENT	MEC-71
	(REEL POSITION CHANGE MOTOR)	
7-24.	LOADING / SUB LOADING COMPLETION AND UN LOADING / SUB LOADING COMPLETION SWITCHES POSITION ADJUSTMENT	MEC-72
7-25.	CLEANER ROLLER REPLACEMENT	MEC-74
7-26.	CLEANER SOLENOID REPLACEMENT AND ADJUSTMENT	MEC-74
7-27.	SUPPLY REEL TABLE AND TAKE UP REEL TABLE REPLACEMENT AND ADJUSTMENT	MEC-75
7-28.	BUFFER ARM REPLACEMENT	MEC-76
7-29.	A/C HEAD CLEANER UNIT REPLACEMENT	MEC-77
7-30.	A/C HEAD CLEANER PAD REPLACEMENT	MEC-78
7-31.	CASSETTE IN SW ADJUSTMENT	MEC-79
7-32.	V PHOTO SW ADJUSTMENT	MEC-79
7-33.	UD PHOTO SW ADJUSTMENT	MEC-80

Notice in use of Alignment Tape

D3 and D5 Alignment tape is required for Mechanical adjustment.
In case of use D3 and D5 alignment tape, please be noticed indication below.

1. Use of D3 Alignment tape

If VTR does not accept insertion of D3 Alignment tape, please confirm setting of SW6071 on M1 board.
D3 cassette can be inserted to VTR by setting of SW6071-6. But the setting is different by the syscon software version as follows.

1-1. SYSCON software version is before 0.07L.

ON: D3 enable

OFF: D3 disable

1-2. SYSCON software version is 0.07L or higher.

ON: D3 disable

OFF: D3 enable

The SW6071-6 is set to be able to insert D3 cassette to VTR as factory default setting.

2. SYSTEM Setting

In case of use D3 and D5 alignment tape, please set the system to 525I/59.94 mode on SYSTEM SET UP menu.

1. Tape Transport Adjustment Procedures

1. Name of Tape Transportation

There are 12 Post Rollers with bearing, one fixed Inclined post and A/C Head.

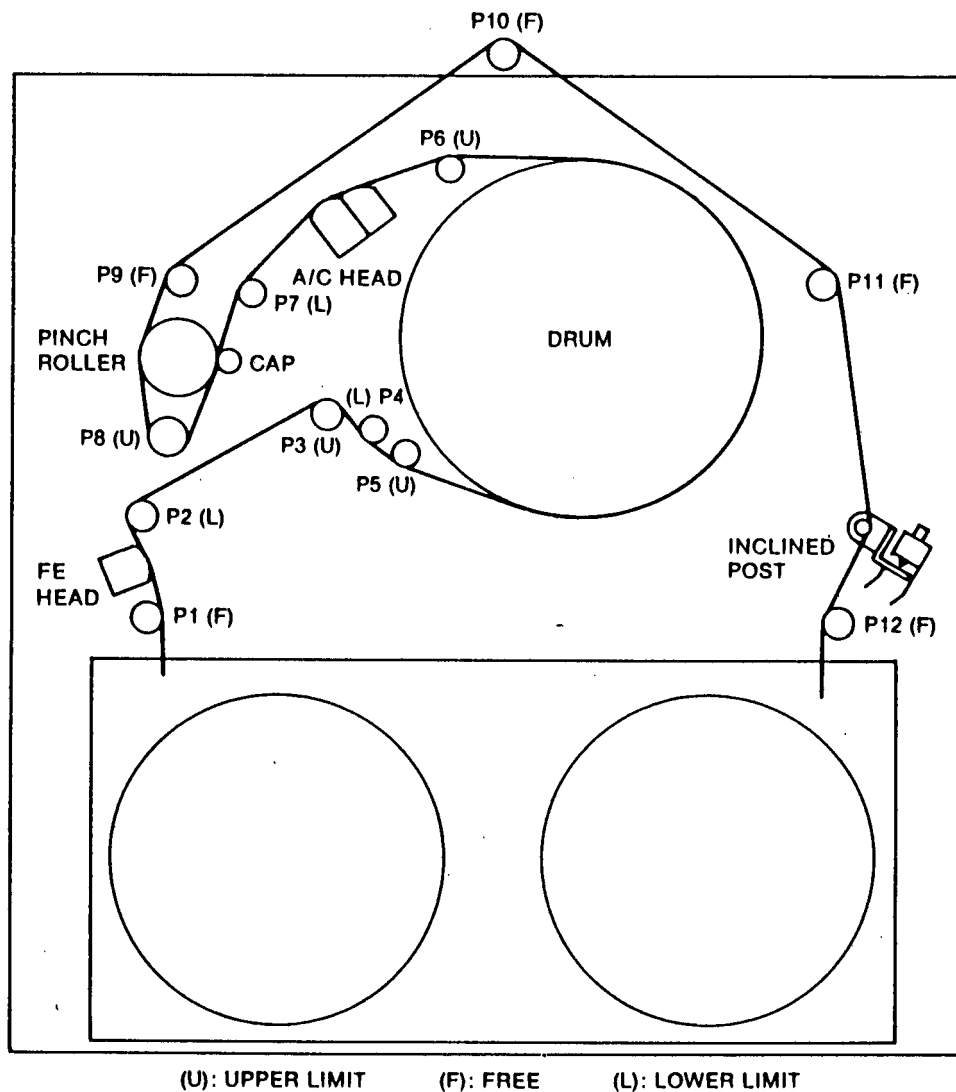
Posts P1 through P12 need height adjustment.

P3 post needs height adjustment, tension adjustment and inclined angle adjustment.

However since inclined angle of P3 post is adjusted in the factory, the adjustment isn't required usually.

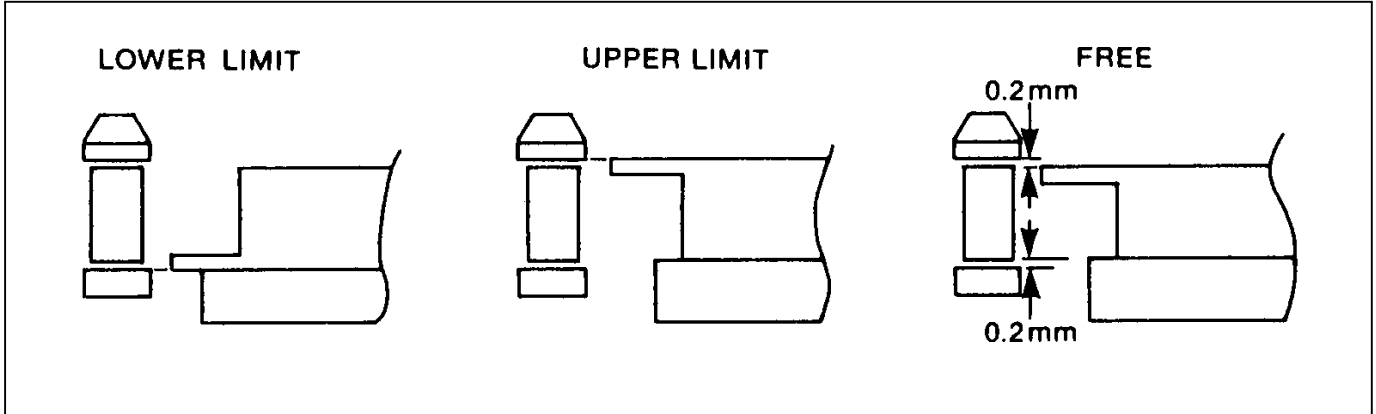
A/C head needs tilt adjustment, height adjustment, azimuth adjustment and X value adjustment.

The tilt angle of the A/C head influences the exit portion of RF envelope linearity adjustment.



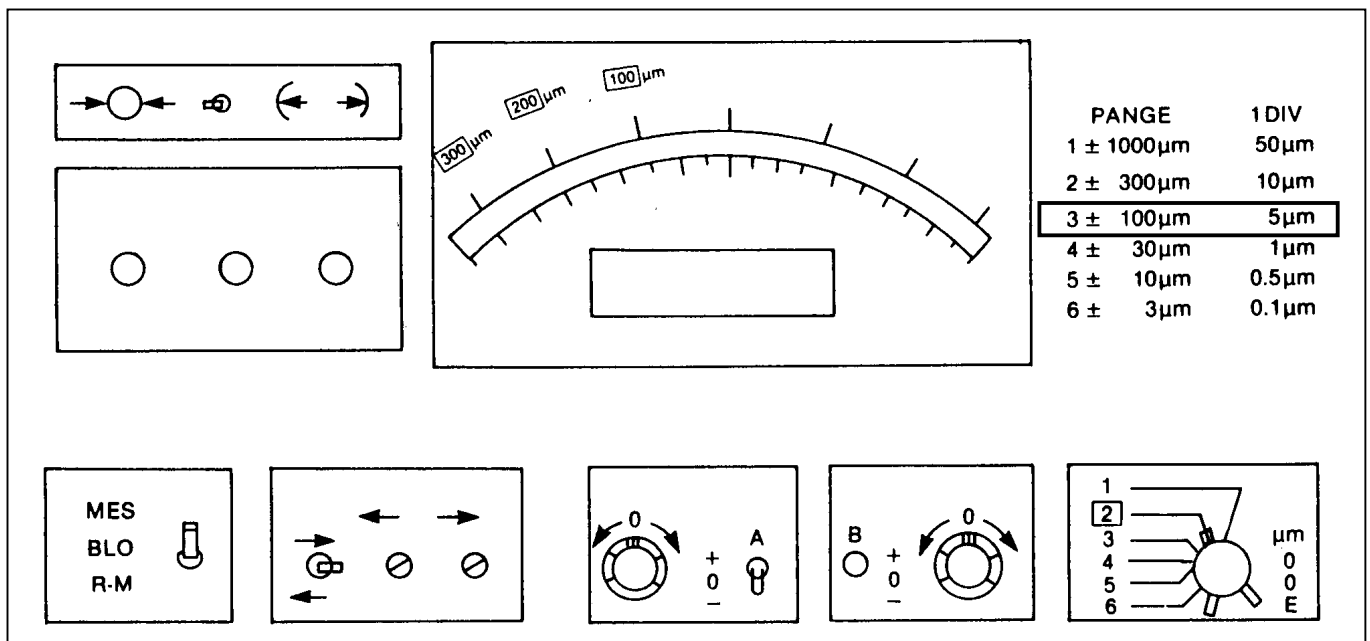
2. Post Height Pre-Adjustment (Factory Adjustment)

After the old post has been replaced with a new one, the original post height required for the post roller cannot be restored unless the hex screw on top of the brush is turned. Post height coarse adjustment can be made with mechanical neutral adjustment plate and post height fixture at the loading and/or unloading. In order to do this, remove front loading unit and install the mechanical neutral adjustment plate over the reel tables. Then place the post height fixture on the Mechanical Neutral Adjustment Plate as shown in figure. The upper and lower flanges of the P1, P2, P3, P4, P5 and P12 post should be touch the upper and lower surface of fixture as shown in figure. If these posts do not touch the surface, adjust the post height as needed.

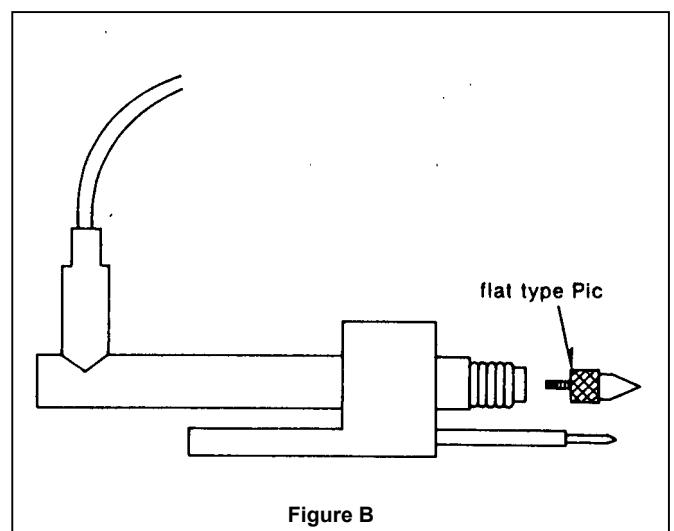
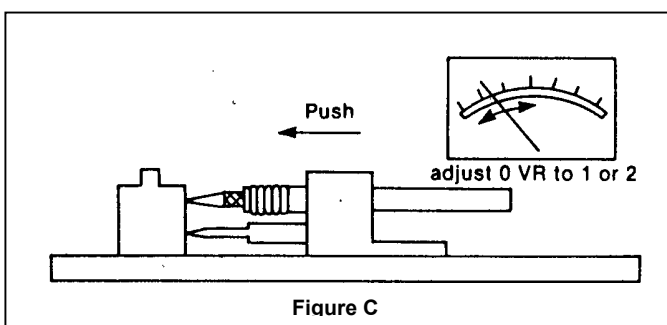
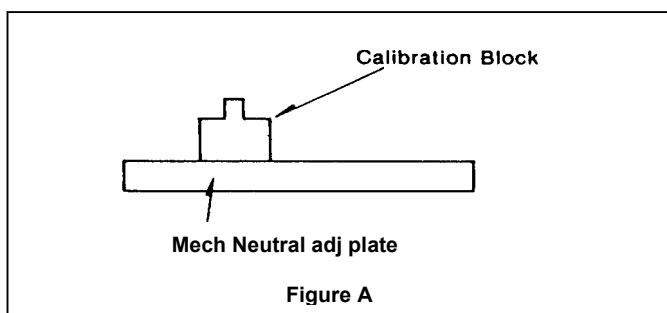


3. Inclined angle Confirmation & Adjustment of P3 and Inclined Post

<Micro Meter calibration >



1. Turn the power ON. (Rear panel)
2. Set the E/mm SW to mm side on the rear panel.
3. Set the Range VR to 3. (Range ± 100mm)
4. Connect the Micro Meter Pick Up to A side on the rear panel.
5. Set the A select button to + side on the front panel.
6. Set the B select button to 0 side on the front panel.
7. Put the calibration block on the Mech Neutral adjustment Plate as shown in Figure A.
8. Change the Micro Meter gauge head pick up to flat type as shown in Figure B.
9. Push the Micro Meter Pick Up to calibration block as shown in Figure C.
10. Adjust the VR to be reference point. (0)



3-1. Confirmation of P3 Post Inclined angle

In order to confirm the P3 post inclined angle, take the following steps.

Step 1:

Place the unit in FWD and REV mode with the pre-recorded tape.

(FWD/REV in capstan mode which is -3 to +2 speed)

Confirm no wrinkles around tape upper edge at the P3 post in any of those modes.

If there is wrinkles, adjust the P3 post inclined angle with the fixture.

Step 2:

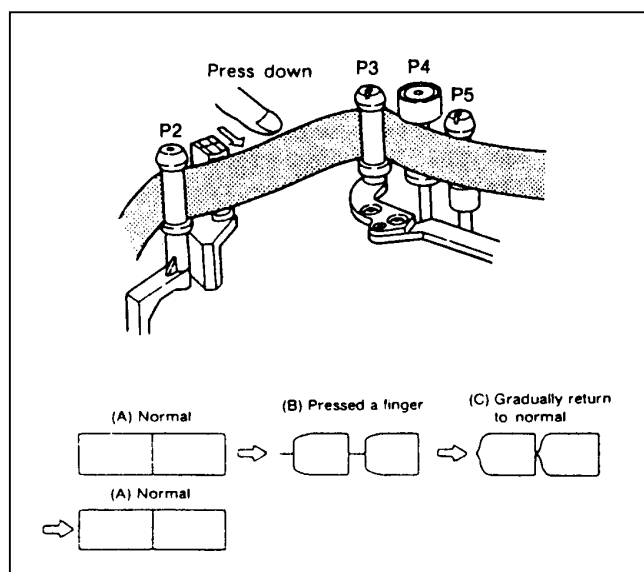
Play the pre-recorded tape.

Gently press down upper edge of the tape to be the (B) waveform as shown in figure and then release finger from the tape. Confirm that at this moment the envelope recovers from (B) to (C) and back to (A).

If the P3 post is properly adjusted, it will take from 1 to 2 seconds to recover from (B) to (C) to (A).

If the P3 post inclined angle is smaller, it takes more than 2 seconds to recover from (B) to (C) to (A). In this case, readjust the P3 post inclined angle with the fixture.

If the P3 post inclined angle is bigger, it takes less than 1 second to recover from (B) to (C) to (A). In this case, adjust the P3 post inclined angle with the fixture to achieve recovery time to be 1 to 2 seconds.



3-2. Confirmation of Inclined Post Inclined angle

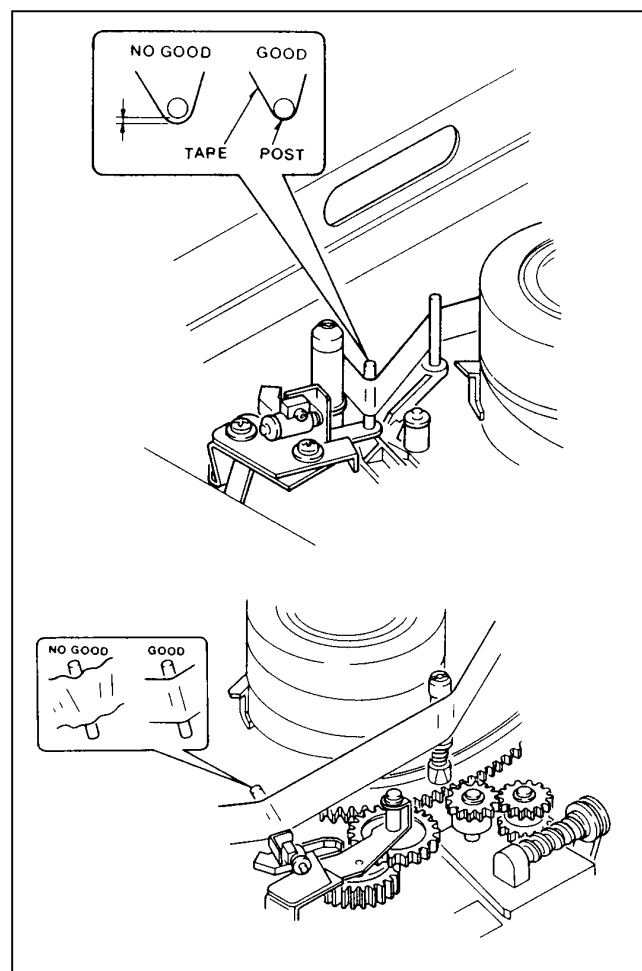
Step 1:

Insert a pre-recorded tape into the VTR and alternately place it in VAR X-1 speed and VAR X2 speed modes. In each mode, confirm that the P3 post is at its upper limit and that the tape is not creased or wrinkled. If upper edge of the tape at the P3 post is wrinkled, adjust the P3 post inclination or the inclined post angle.

Step 2:

Insert a tape and rotate the sub loading motor by hand to move to half loading completion position. Confirm that the tape at the inclined post has no clearance between tape and inclined post and no wrinkles as shown in figure.

If there is clearance or wrinkles, adjust the inclined post angle.



3-3. P3 Post Inclined angle Adjustment

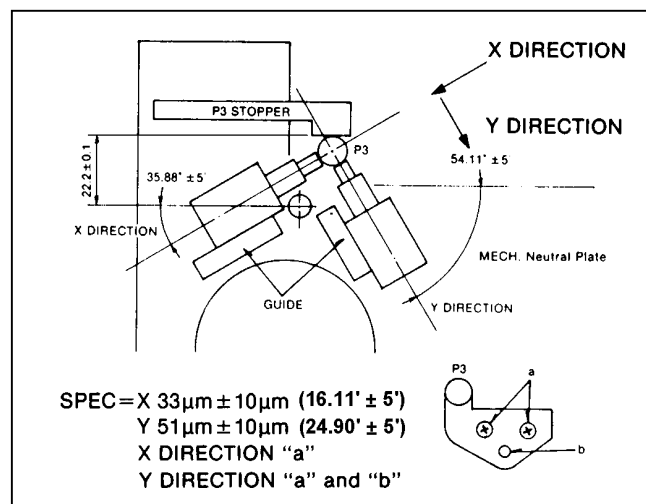
SPEC.	X direction: $33\mu\text{m} \pm 10\mu\text{m}$ ($16.11' \pm 5'$) Y direction: $51\mu\text{m} \pm 10\mu\text{m}$ ($24.90' \pm 5'$)
MODE	P3 post just touches P3 stopper (manual sub-loading)
M.EQ	TESA TTA-20(Micro Meter) TESA GT-22 (Micro Meter and Pick up: 7mm pitch)
TOOL	VFK0719(Mech. neutral Plate) VFK0742(Micro Meter Pick up Fixture) VFK1031(Pick up) VFK0771(Micro Meter calibration block) Hex Wrench(M2.6)

1. Turn power off.
2. Remove the front loading unit.
3. Turn power on and set VTR to the reel base in M cassette size position as follows from front panel.
 - ① Press **TEST** button to open TEST menu.
 - ② Press **F4** (MECHA) and **F** buttons simultaneously to open "TEST: MECHA" menu.
 - ③ Press **F1** (MODE) button and set "NO TAPE" mode.
 - ④ Press **F3** (C.SIZE) button and set "M".
 - ⑤ Press **STOP** button and after VTR loading is completed, press **EJECT** button.
 - ⑥ Turn the power off.
4. Place the Mech. Neutral Plate with P3 stopper on the reel base.
5. Set the Micro Meter pick up to the pick up fixture with M3 screw.
6. Calibrate the Micro meter pick up to reference position with the calibration block.
7. Rotate the sub-loading motor until the P3 post (tension post) just touches with the P3 stopper.
8. Set the Micro Meter pick up to the guide (X direction and Y direction) and measure the angle.
9. If the angle of X and Y direction are not within the specification, adjust screw (A) and (B) so that the angle of X and Y direction are within the specification.

Hints

- ① Adjustment is easier in the X direction.
- ② Adjusting the Y direction may cause the X direction adjustment to be changed. Adjust X and Y directions alternately until both of them are in the specification.
- ③ Slight turning of hex screws (b) and (a) change the inclination in the direction of rotation.
 - (a) When the two screws (a) are tightened, the micrometer needle moves toward the + side in the X direction.
 - (b) When the two hex screws (b) are tightened, the micrometer needle moves toward the + side, and it moves toward the - side when the screws are loosened.

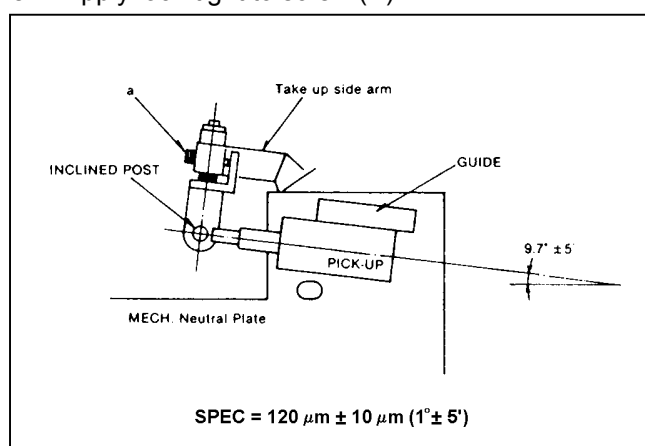
10. Apply lock-tight to screws (b) and (a).



3-4. Inclined Post Inclined angle Adjustment (1)

SPEC.	120 μ m \pm 10 μ m (1' \pm 5')
MODE	Sub unloading completion
M.EQ	TESA TTA-20(Micro Meter) TESA GT-22(Micro Meter Pick up: 7mm pitch)
TOOL	VFK0719(Mech. Neutral Plate) VFK0742(Micro Meter Pick up Fixture) VFK1031(Pick up) VFK0771(Calibration Block) Hex Wrench(M2.6)

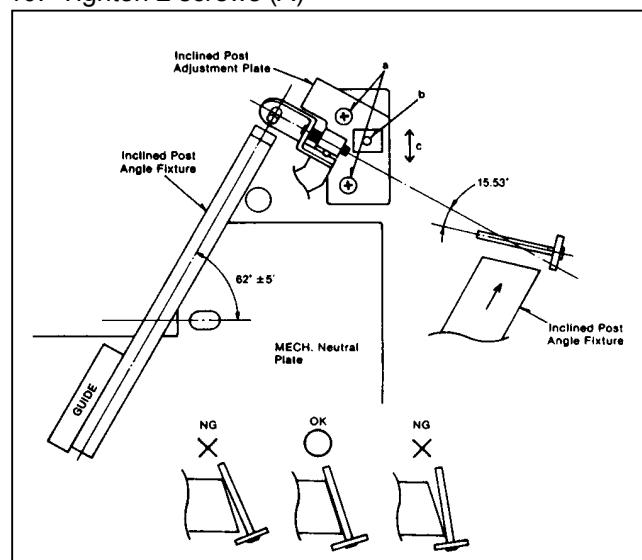
1. Turn power off and remove the front loading unit.
2. Set the VTR as follows.
 - ① Press **TEST** button to open TEST menu.
 - ② Press **F4** (MECHA) and **F** buttons simultaneously to open "TEST: MECHA" menu.
 - ③ Press **F1** (MODE) button and set "NO TAPE" mode.
 - ④ Press **F3** (C.SIZE) button and set "M".
 - ⑤ Press STOP button to change the reel table position.
 - ⑥ Press EJECT button and then turn power off.
3. Place the Mech. Neutral Plate on the Reel base.
4. Calibrate the Micro Meter. (Refer to 4-1. Tension meter calibration.)
5. Set the Micro Meter pick up to the guide as shown in figure.
6. Touch the micrometer pick-up to the inclined post and make sure the meter reading is within 120 μ m \pm 10 μ m (1' \pm 5').
7. If the inclined post angle is not within the specification adjust hex screw "a".
8. Apply lock-tight to screw (A).



3-5. Inclined Post Inclined angle Adjustment (2)

SPEC.	Inclined Post flatly touch with the inclined angle adjustment tool surface (15.53° \pm 5')
MODE	Loading completion
M.EQ	TESA TTA-20(Micro Meter) TESA GT-22(Micro Meter Pick up: 7mm pitch)
TOOL	VFK0719(Mech. Neutral Plate) VFK0722(Inclined Post Angle Fixture) VFK0358(Eccentric Screwdriver: Ø2)

1. Turn power off.
2. Remove the front loading unit.
3. Set the VTR as follows.
 - ① Press **TEST** button to open "TEST" menu.
 - ② Press **F4** (MECHA) and **F** buttons simultaneously to open "TEST: MECHA" menu.
 - ③ Press **F1** (MODE) button set "NO TAPE".
 - ④ Press **F3** (C.SIZE) button and set "M".
 - ⑤ Press STOP button and after VTR loading is completed, press EJECT button.
 - ⑥ Turn power off.
4. Place the Mech. Neutral Plate on the Reel base and remove the P3 stopper.
5. Set the Mechanism to loading completion position.
6. Set the Inclined Post Inclined Angle adjustment tool as shown below.
7. Confirm the Inclined Post is flatly touched with the tool front surface.
8. If not, loosen 2 screws "a" and set the eccentric driver to the hole "b".
9. Adjust the angle of the Inclined Post so that the post just touches with the tool surface (15.53° \pm 5').
10. Tighten 2 screws (A)



4. Confirmation and Adjustment of Tension

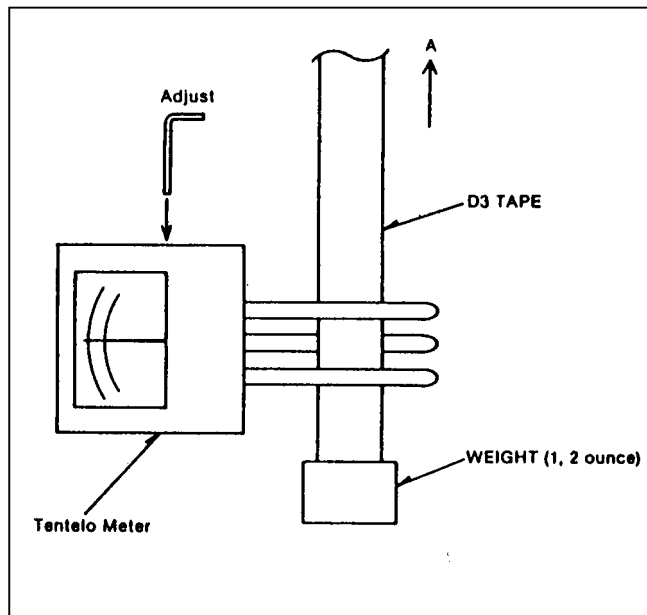
4-1. Tension Meter Calibration

<STEP 1>

1. Prepare a length of D3 tape of about 30cm with a one-ounce weight attached to its cut end. Lifting the tape at a speed of 167.228mm/sec in the direction indicated in the following figure, confirm if the meter reading indicates one ounce or not. If not, adjust the hexagon screw on the side of the tension meter until the meter reading indicates one ounce.

<STEP 2>

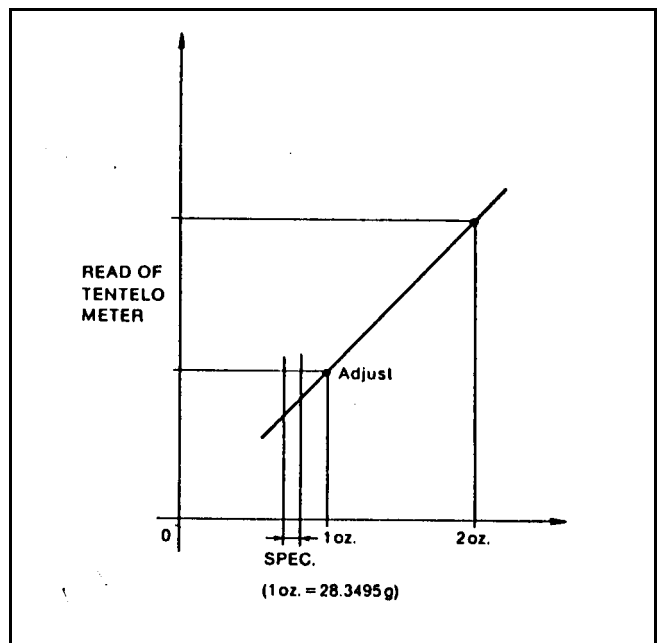
1. Prepare a length of D3 tape of about 30cm with a two-ounce weight attached to its cut end. Lifting the tape at a speed of 167.228mm/sec in the direction indicated by in the figure, record the meter reading and calculate the actual value from the correction table.



(Example)

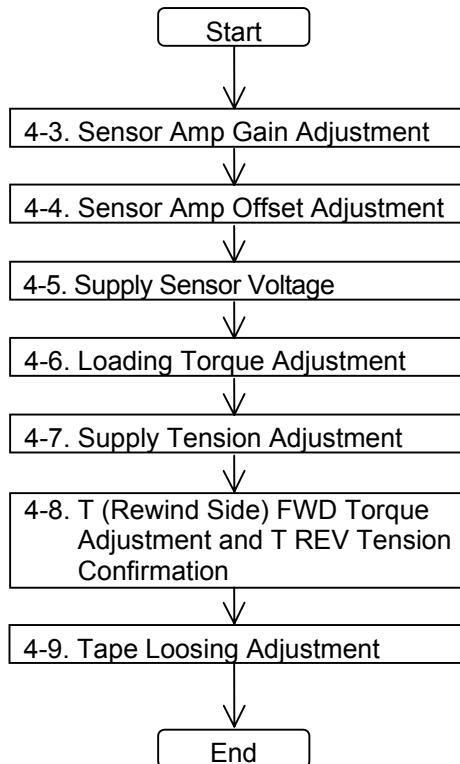
If the Tentelo meter indicates a value of 461mN (47gf) when the tension is measured with a two-ounce weight attached to the tape, then the actual tension will be 243.84mN (24.88gf) when the needle swings to 226mN (23gf).

2 oz. Indication	Tension specification 23 ± 2		
	21	23	25
47	23.572	24.884	26.197
48	23.313	24.696	26.079
49	23.053	24.507	25.961
50	22.794	24.318	25.842
51	22.535	24.130	25.724
52	22.276	23.941	25.606
53	22.016	23.752	25.488
54	21.757	23.563	25.370
55	21.498	23.375	25.252
56	21.239	23.186	25.134
57	20.979	22.997	25.015
58	20.720	22.809	24.897
59	20.461	22.620	24.779
60	20.202	22.431	24.661
61	19.942	22.243	24.543
62	19.683	22.054	24.425
63	19.424	21.865	24.306
64	19.165	21.676	24.188
65	18.905	21.488	24.070
66	18.646	21.299	23.952
67	18.387	21.110	23.834



4-2. Tension Adjustment Method

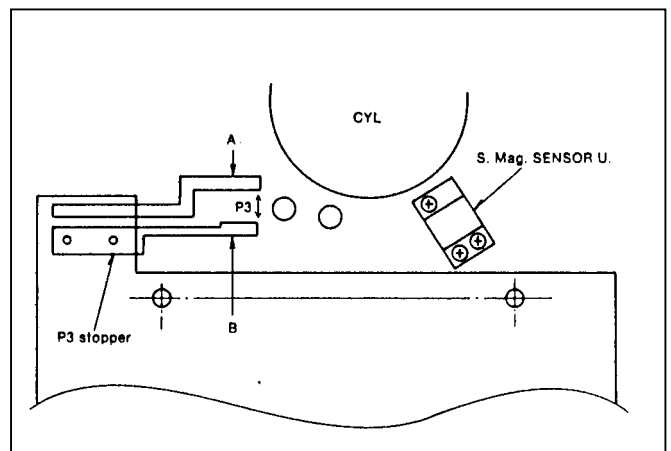
Adjust tension according to the following flowchart.



4-3. Sensor Amp Gain Adjustment

BOARD	SERVO CONTROL
TP	TP2
ADJ.	VR1
TAPE	—
INPUT	—
MODE	EJECT
M.EQ	DIGITAL MULTI METER
SPEC.	TP2 = $1.4 \pm 0.1V$

1. Remove the front loading unit in the EJECT position and set the mechanical neutral adjustment plate in place.
2. Rotate sub-loading motor by hand until sub-loading is completed, and then install tension gain adjustment fixture.
3. Adjust gain by VR1 so that the voltage difference between (A) (when P3 post touches the mechanical neutral adjustment plate) and (B) (when P3 post touches tension gain adjustment fixture) is $1.4 \pm 0.1V$.



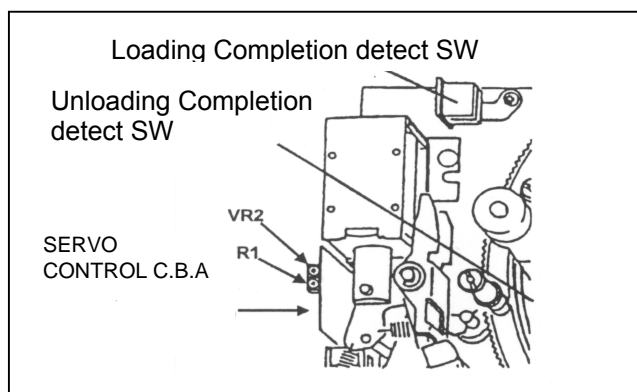
[Check Items]

1. After adjustment is completed, move P3 post as close as possible to the cylinder, and make sure the voltage is more than 3.1V at this position.
2. If the voltage is less than 3.1V, re-adjust the gain so that the voltage difference between (A) and (B) is 1.5V.

4-4. Sensor Amp Offset Adjustment

BOARD	SERVO CONTROL
TP	TP2
ADJ.	VR2
TAPE	—
INPUT	—
MODE	EJECT
M.EQ	DIGITAL MULTI METER
SPEC.	TP2 = 2.5 ± 0.01 [V]

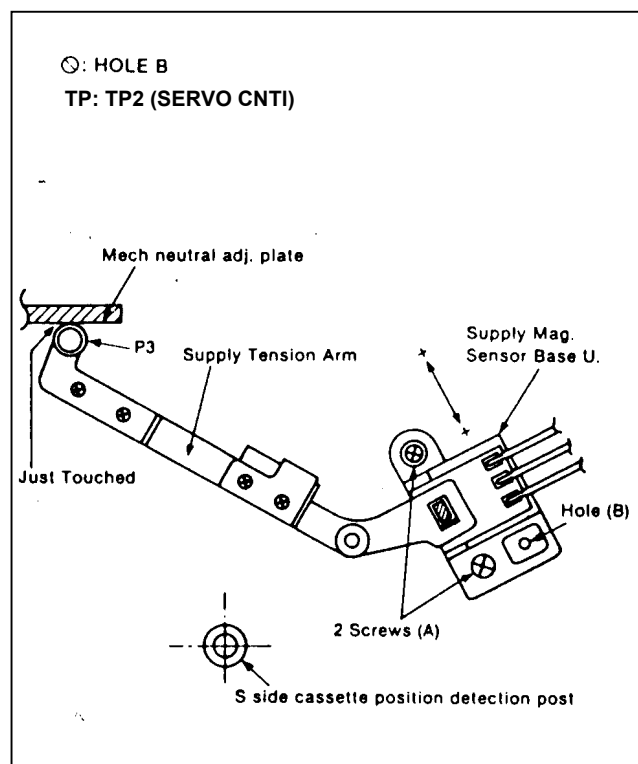
1. Adjust VR2 so that TP2 DC voltage is 2.5 ± 0.01 V in EJECT made.



4-5. Supply Sensor Voltage Adjustment

BOARD	SERVO CONTROL
TP	TP2
ADJ.	S.MAGNET SENSOR BASE UNIT
TAPE	—
INPUT	—
MODE	—
M.EQ	DIGITAL MULTI METER
SPEC.	TP2 = 2.5 ± 0.05 [V]

1. Set Mech. Neutral Plate after removal of front loading unit.
2. Set to loading completion mode by hand.
3. Loosen two screws (A) and insert the eccentric driver($\varnothing 2 - \varnothing 4$) into hole (B) and Adjust the position of S.Magnet Sensor Base Unit until the voltage at TP2 is in the Specification, 2.5 ± 0.05 V.



4-6. Loading Torque Adjustment

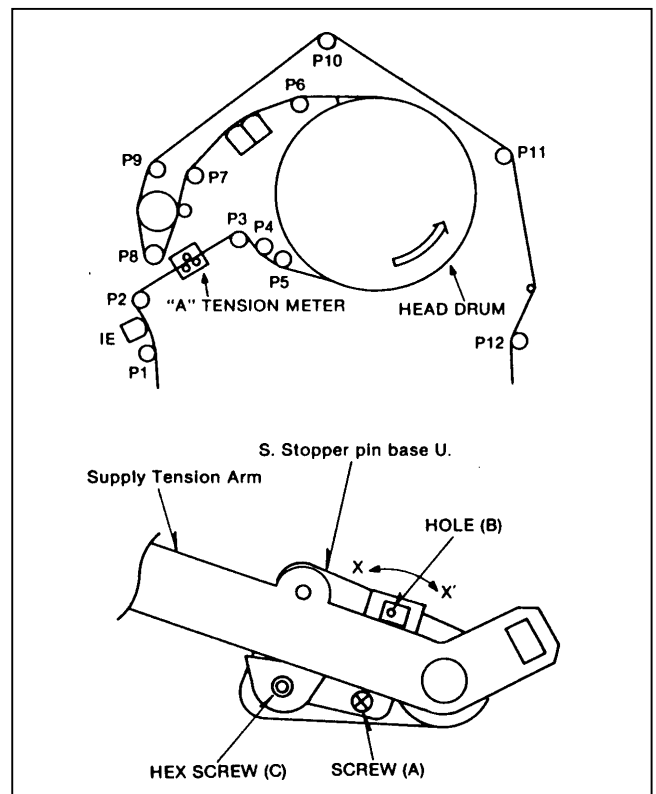
TP	TAKE UP REEL
ADJ.	LOADING VALUE (TEST SERVO MENU)
TAPE	—
INPUT	—
MODE	—
M.EQ	TORQUE GAUGE
SPEC.	608mN•m \pm 19.2mN•m (62gf•cm \pm 28gf•cm)

1. Remove the front loading unit.
2. Press **TEST** button to open TEST menu.
3. Press **F7** (SERVO) button to open the SERVO menu.
4. Press **F1** (TORQUE) button and **F13** (ADJ ENABLE) button simultaneously.
5. Select LOADING with the cursor key and then press **F3** (MEASURE) to set LOADING.
6. Set the Dial Torque Gauge on the Reel table and press STOP button.
7. Change so that loading torque by turning the ADJUST knob so that loading torque is in the specification.
8. After loading torque adjustment is done, with the dial torque gauge mounted on the reel table, turn the torque gauge by hand until it reads around 785mN (80gf•cm). Then release the gauge and read it when it stops turning.
9. Repeat step 8 three times and confirm that the average of the three readings is within the specification.
10. Press **F3** and turn power off.

4-7. Supply Tension Adjustment

TP	"A" (P2-P3)
ADJ.	SUPPLY STOPPER PIN BASE UNIT
TAPE	BLANK TAPE (M cassette)
INPUT	—
MODE	PLAY
TOOL	VFK0132(TENSION METER) VFK0357(ECCENTRIC DRIVER (Ø1.5))
SPEC.	226mN \pm 19.2mN (23gf \pm 2gf)

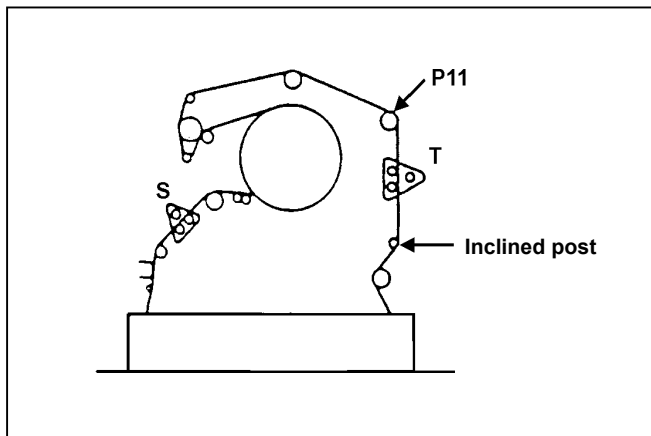
1. Remove the front loading unit.
2. Press **TEST** button to open TEST menu.
3. Press **F4** (MECHA) and **F** buttons simultaneously to open "TEST: MECHA" menu.
4. Press **F1** (MODE) button and set "NO TAPE".
5. Press **F3** (C.SIZE) button and set "M".
6. Insert an M-size cassette that has been fully rewound, and then press STOP button.
7. Set a tension meter between P2 and P3 (as shown in the figure below), and adjust the stopper pin base U position until it is within the specification.
8. Adjust the position (refer to the figure below) by loosening screw (A). Then insert an eccentric screwdriver into hole (B) and adjust the tension until the meter reading is approximately 226mN \pm 49mN. After coarse adjustment, tighten screw (A) with a torque of 58.8cN.m - 78.5cN.m (6kgcm - 8kgcm). Then turn set screw (C) and adjust the tension to 226mN \pm 19.2mN.
9. After completing the adjustment, apply lock-tight to the screws.



4-8. FWD Torque Adjustment and T REV Tension Check

TP	between P11 post and inclined post
ADJ.	T-REEL FWD adjustment value (TEST SERVO Menu)
TAPE	M cassette tape beginning
INPUT	—
MODE	REC/PLAY, REV X1(VAR)
M.EQ.	Tension meter
SPEC.	294mN \pm 49mN(30gf \pm 5gf)

1. Press **TEST** button to open TEST menu.
2. Press **F7** (SERVO) button to open the SERVO menu.
3. Press **F1** (TORQUE) button and **F13**(ADJ ENABLE) button simultaneously.
4. Select T-REEL FWD with the cursor key.
5. In REC/PLAY mode, insert Tension meter between P11 and inclined post.
6. Adjust T-side tension with the ADJUST knob so that the meter reading is within the specification.
7. In REV x 1 (VAR) mode insert Tension meter between P11 and inclined post.
8. Confirm that T-side tension is within the specification.



5. Confirmation of Head Protrusion

1. Set the attachment shaft by turning the center screw clockwise as shown in figure 1 .

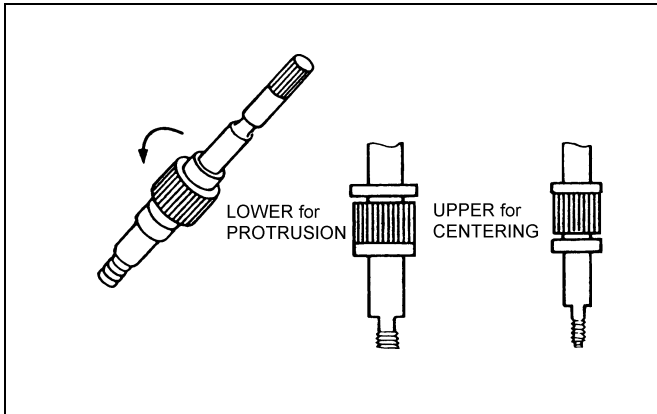


Figure 1 Attachment Shaft

2. Set the head contact portion of Drum Replacement Tool (VFK0737) to the vertical position using the Pick Tool (VFK0779) as shown in figure 2 and 3.

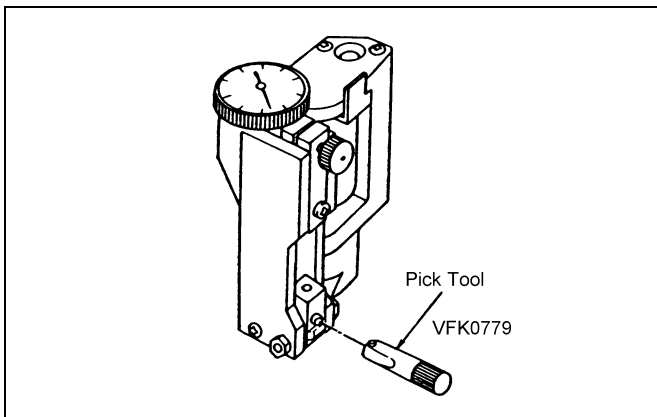


Figure 2 Pick Tool (1)

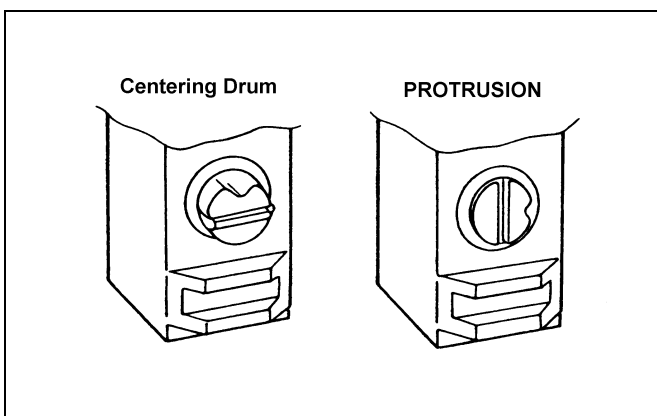


Figure 3 Pick Tool (2)

3. Install the Attachment Shaft to A portion on mechanism chassis as shown in figure 4.

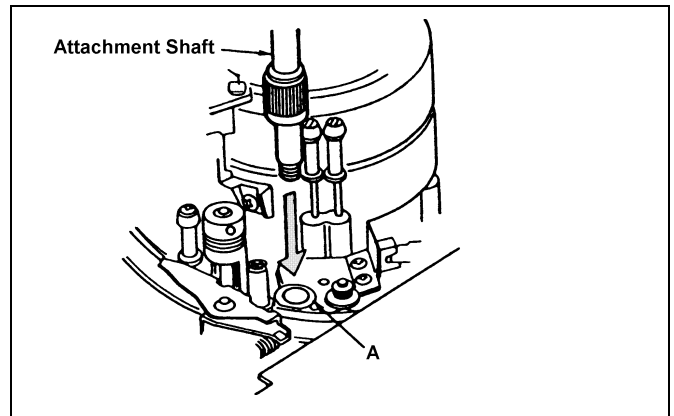


Figure 4 Attachment Shaft

4. Confirm that the lever of Center Drum Replacement Tool is locked and then install it to attachment shaft as shown in figure 5.

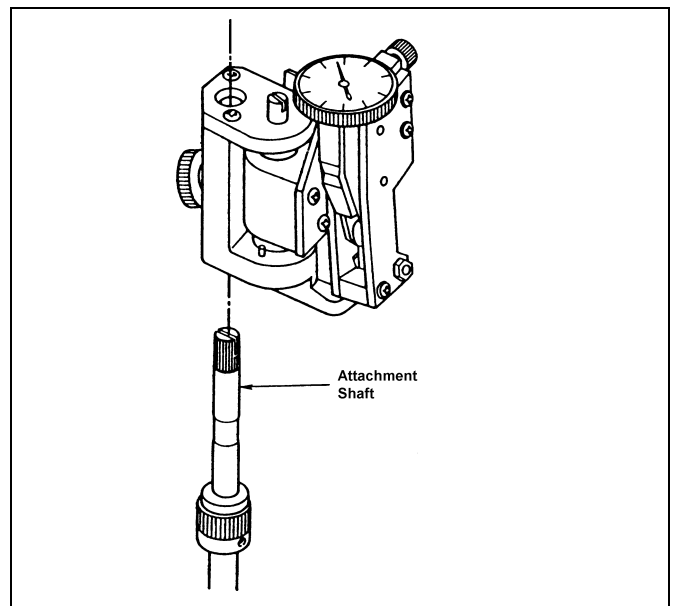


Figure 5 Drum replacement tool

- Set as shown in Fig. 6 so that the attachment plate touches the lower drum and fix it by tightening Volume (A).

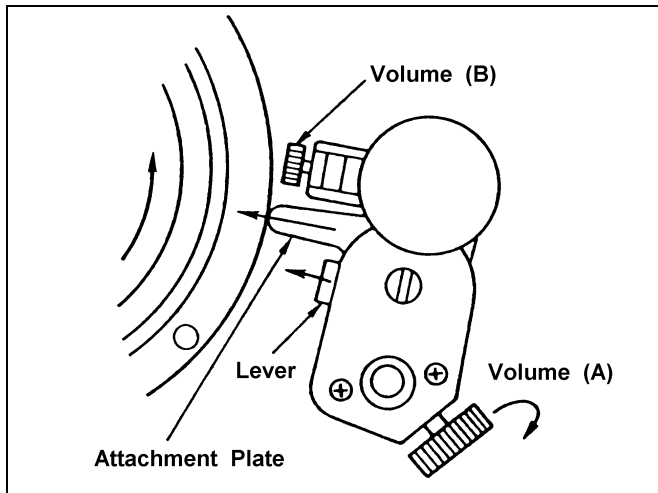
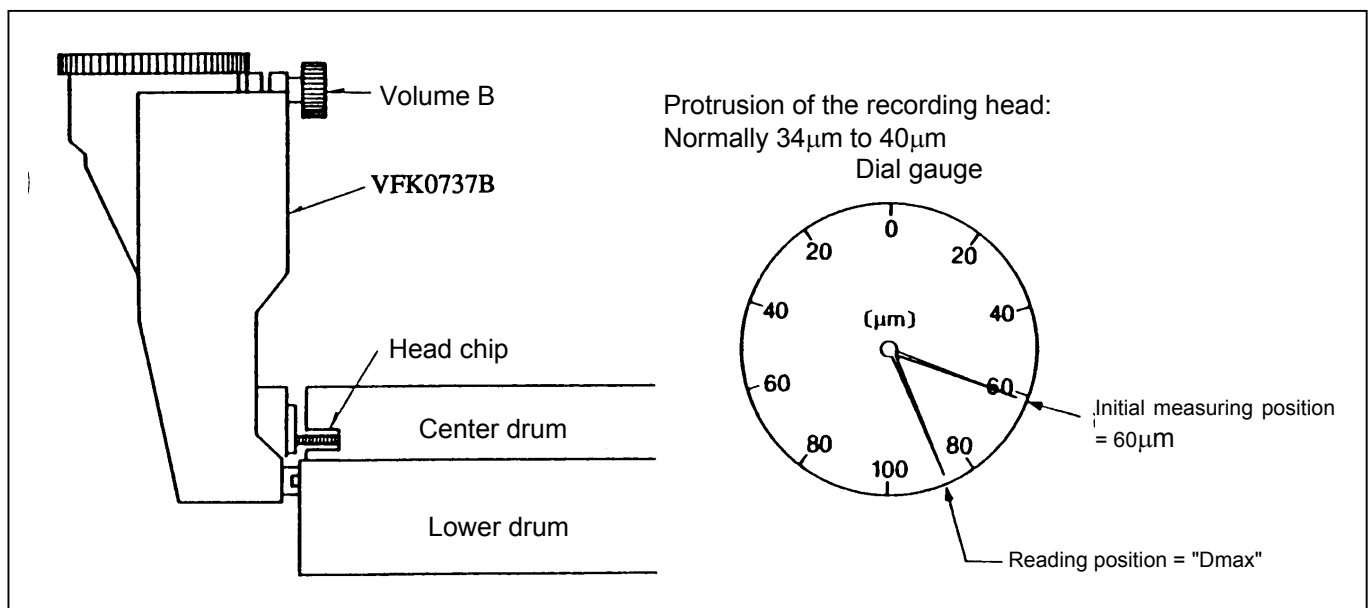


Figure 6

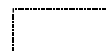
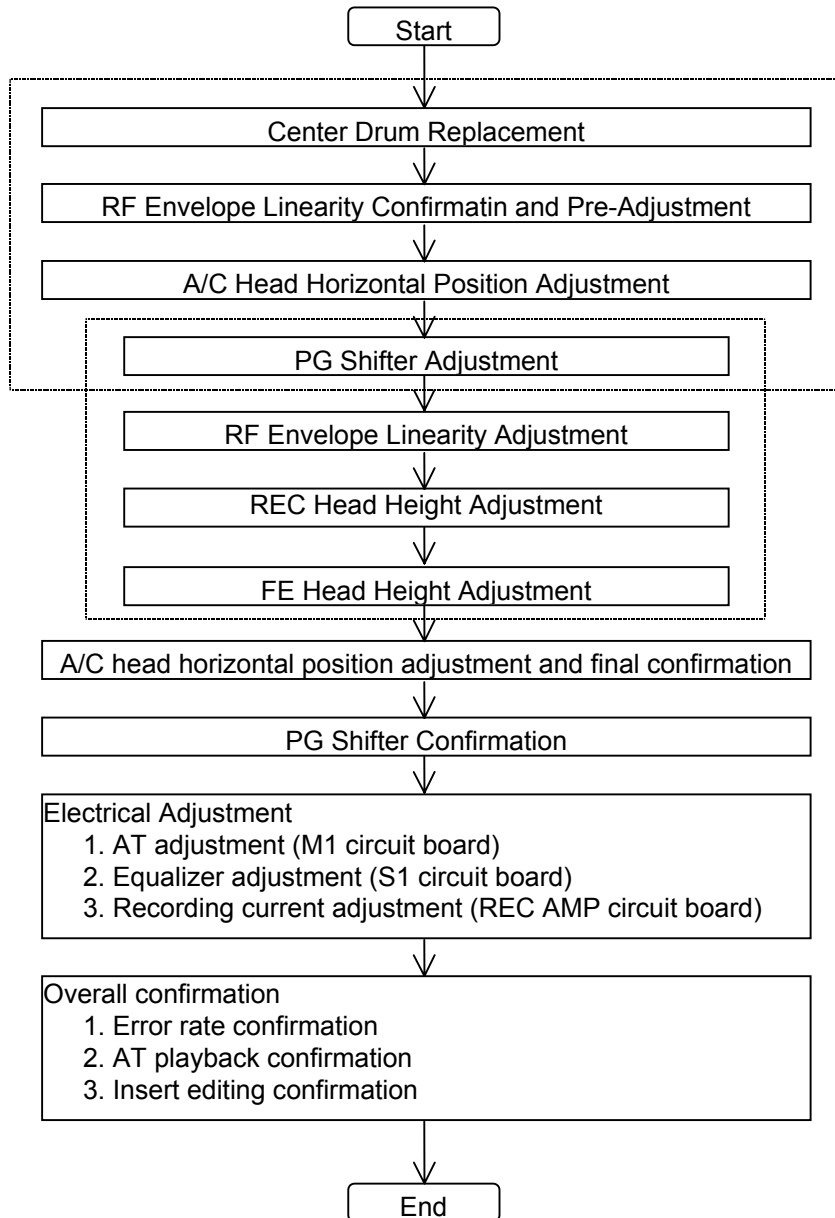
- Fix the Dial Gauge by hand, push the lever in the arrow's direction as shown in Fig. 6, and slowly touch the Dial Gauge(VFK0737B) to center drum. Perform this at the portion where the pickup doesn't touch the head chip.
- Rotate the outer ring of the Dial Gauge to set the meter indication to zero.
- With the condition that pick up portion touches the center drum, adjust the Volume (B) of the Dial Gauge unit so that the scale of the dial gauge indicates $60\mu\text{m}$.
- Slowly turn the center drum counterclockwise and read the value when the pick up touches the head chip.
- The protrusion recommended center drum replacement shown below.
- After measurement, lock the lever on the dial gauge unit and move the jig away from the drum.
- Loosen the locking knob (A) on the dial gauge unit and remove the dial gauge unit.
- Turn the mounting shaft counterclockwise and remove it.



	protrusion of a new head	Protrusion for center drum replacement (recommendation)
R/P & PB head (CH0/CH1/CH2/CH3)	34 to 40 [μm]	20 to 25 or more [μm]
Erase head	32 to 39 [μm]	20 to 25 or more [μm]

6. Center Drum Replacement & Adjustment Procedure

At the time of center drum replacement, follow the flow chart below.



Refer to the Linearity Flowchart

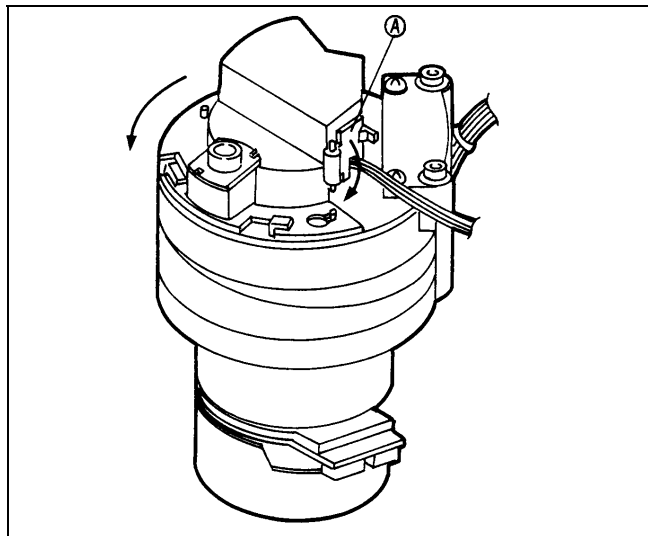


Use Linearity Adjustment Tool

6-1. Center Drum Replacement Procedure

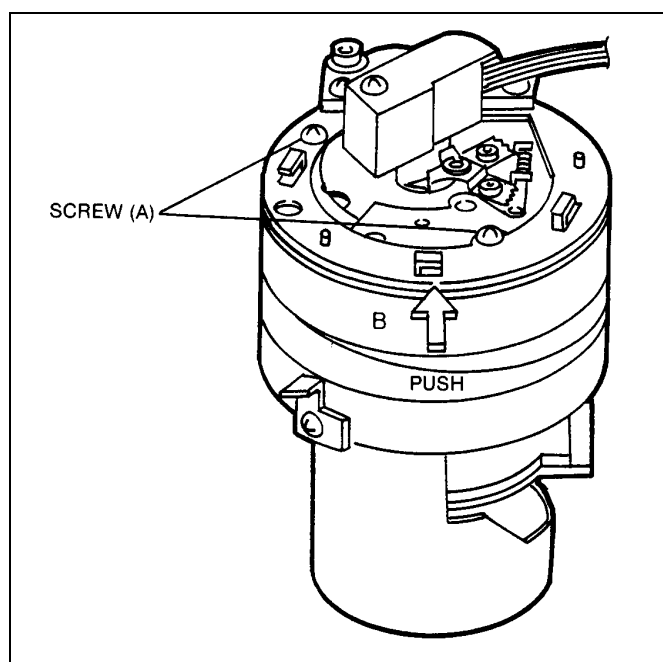
1. Remove Drum cover

1. Pull the cable holder (A) to release the cable from the drum cover.
2. Rotate the drum cover counterclockwise to release the lock.
3. Remove the drum cover.



4. Remove the Head cleaning unit.

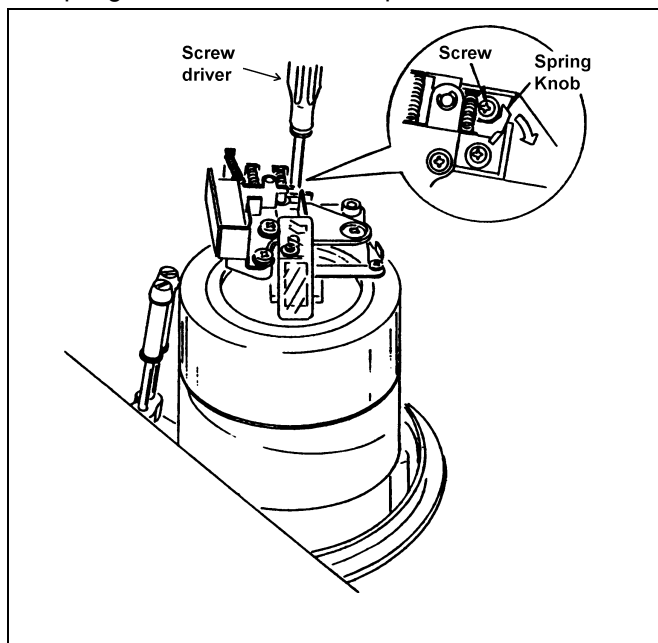
Note: Install of the Drum Cover Base to arrow's direction shown in figure for installation.



5. Unscrew the 2 screws (A) to remove the drum cover base.

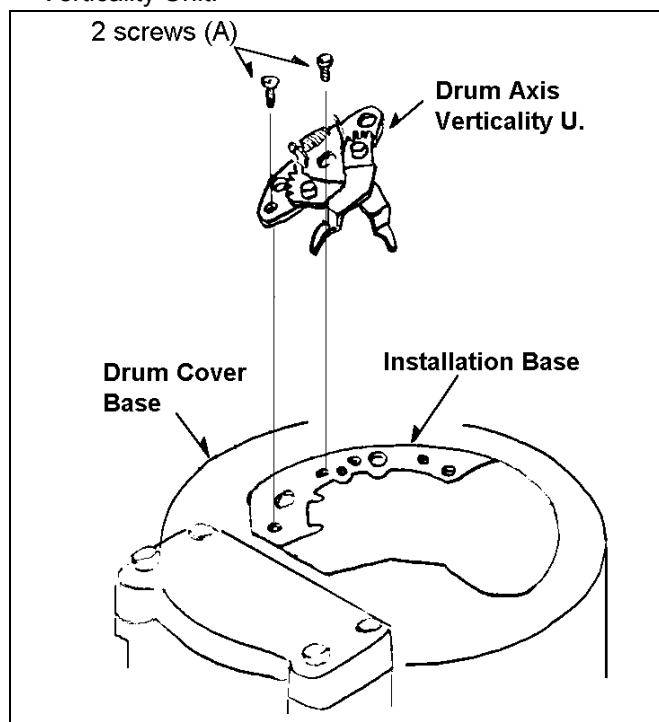
2. Remove Head Cleaning Unit.

1. Remove two screws that are not glued.
2. Since one of screws is under the spring, pull the spring knob and makes the space to insert a driver.



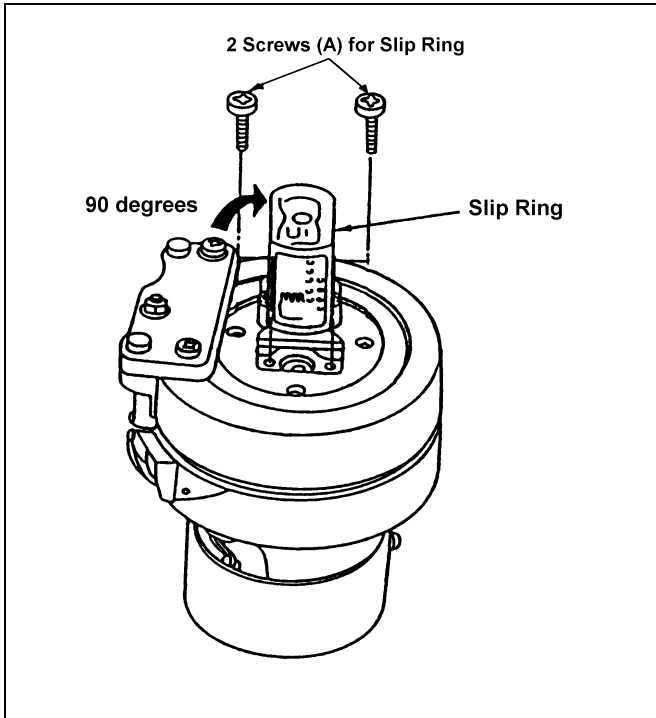
3. Remove Drum Axis Verticality Unit

1. Confirm that Drum Axis Verticality Unit doesn't contact to Slip Ring. If contact, release Drum Axis Verticality Unit from Slip Ring. (Refer to Drum Axis Verticality Adjustment section.)
2. Remove 2 screws (A) and remove Drum Axis Verticality Unit.



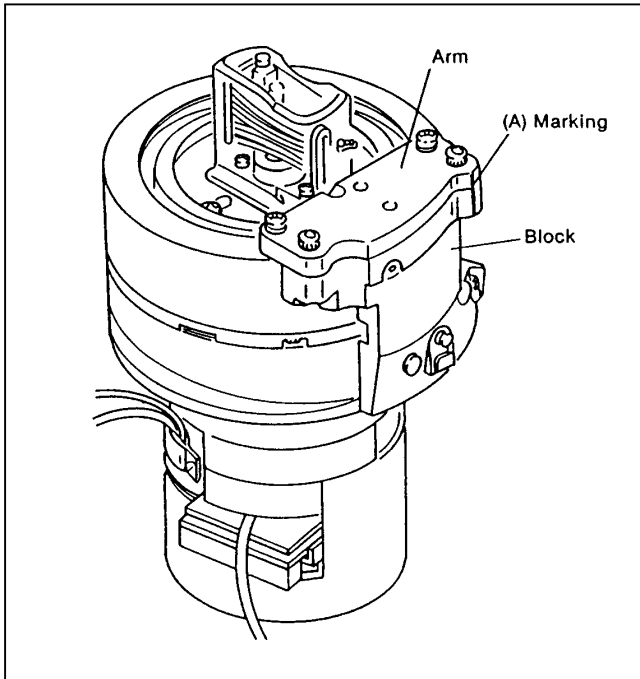
4. Remove Slip Ring Unit

1. Rotate center drum to remove 2 screws (A) on brush unit circuit board.
2. Hold the brush unit and remove 2 screws (A).



5. Remove Upper Drum

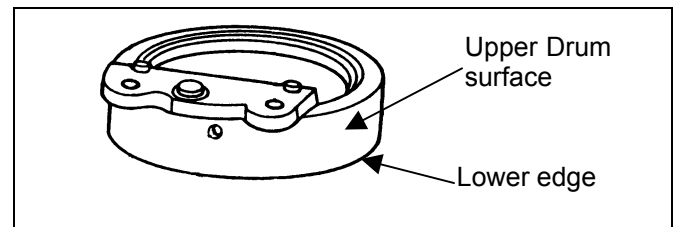
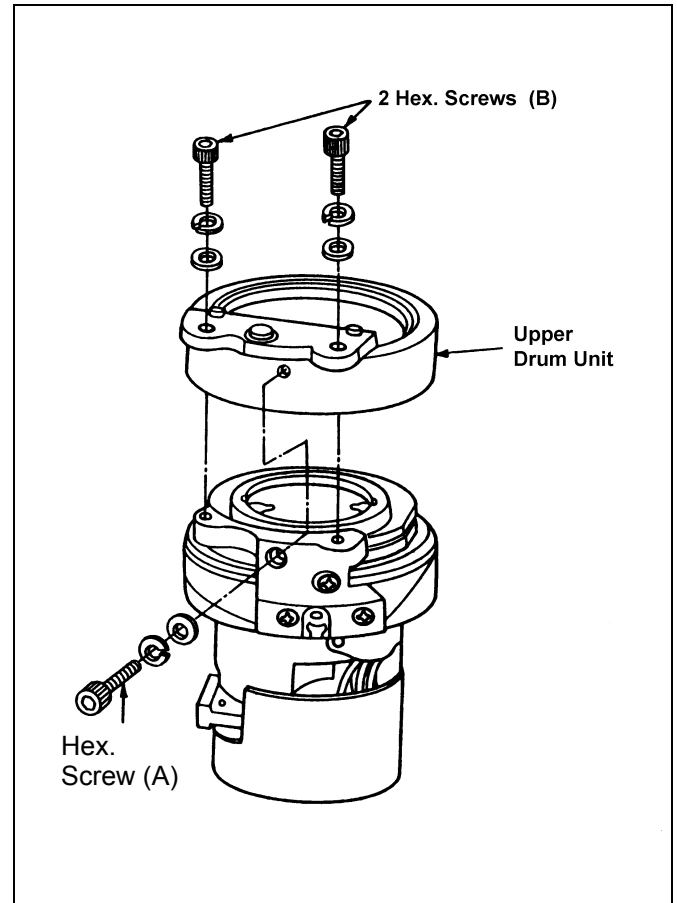
Before removing upper drum, mark the (A) portion as magic pencil for setting position of arm and block



1. Remove two hex screws on upper drum by torque wrench (B).
2. Remove hex screw on the backside of upper drum by torque wrench (A). Select the rotation direction of torque wrench (A) by the selector. It is necessary to attach the torque wrench adaptor.
3. Remove Upper Drum unit.

Note:

Do not damage surface and lower edge of upper drum.

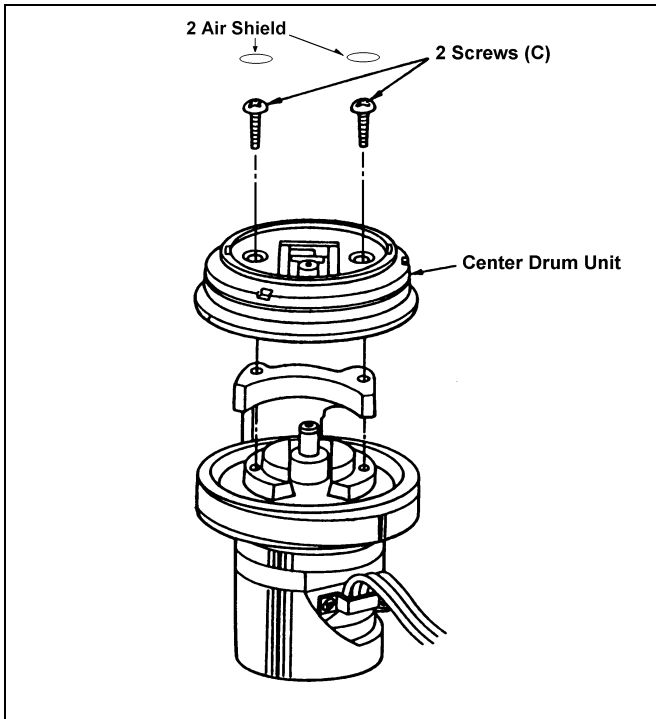


6. Remove Center Drum

1. Remove two Air Shields and remove two screws (C).
2. Remove Center Drum.

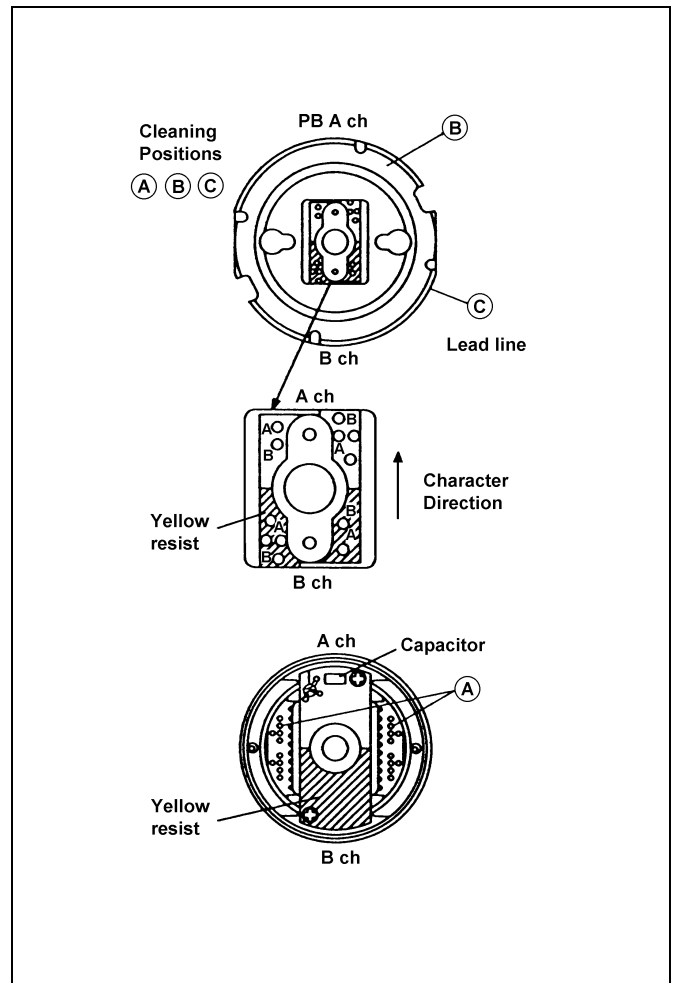
Note:

For installation of new Center Drum, it has the direction. Therefore the direction of Center Drum head A and B must be remembered.



7. Setting Center Drum

1. Clean the indicated portions of Lower Drum Unit as shown in figure (A, B and C portions).
2. Confirm the head chips position on Center Drum and pick up Center Drum without touching the head chips. (Hold shield case.)
3. For Installation of center drum, install it after confirming that the direction matches that of lower drum, and fix it provisionally by alternate tightening of the 2 screws. (At this time, do not tighten the screws securely yet.)



4. If the location of channel can not be discriminated at lower drum side, refer to where the capacitor installed (the capacitor installed at Ach side).

6-2. Eccentric Adjustment

1. DRUM REPLACEMENT TOOL SETUP VFK0737B

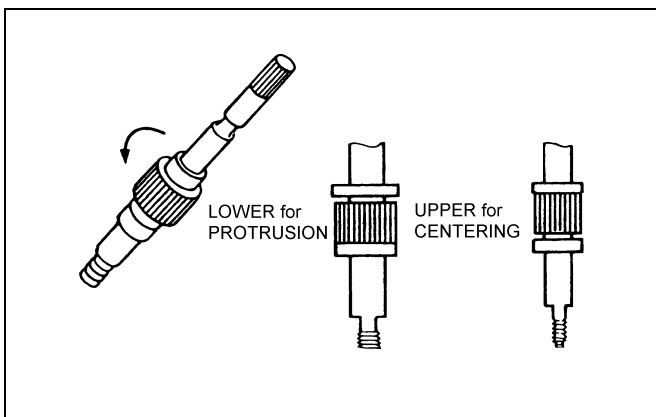
The Drum Replacement tool has two functions, one is center drum eccentric adjustment and the other is head chip protrusion measurement. Therefore it is necessary to select these functions. To select the functions there are two setup portions, one is height of the attachment shaft and the other is head contact portion angle.

The dial meter height is changed by turning the attachment shaft. By this, height adjustment is made so that the measuring point will not come into contact with the head chip at the time of centering adjustment.

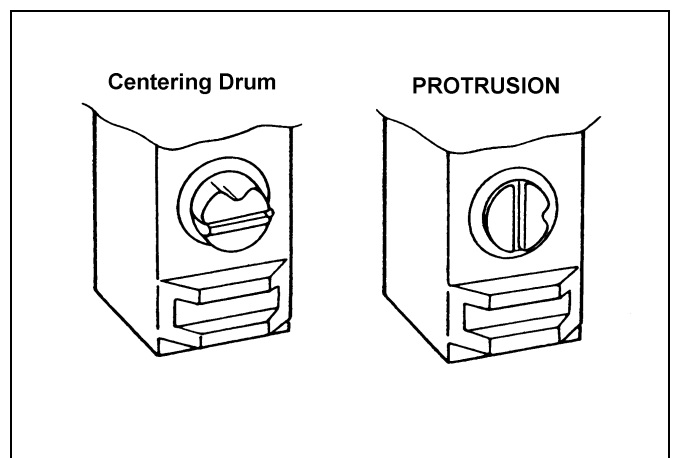
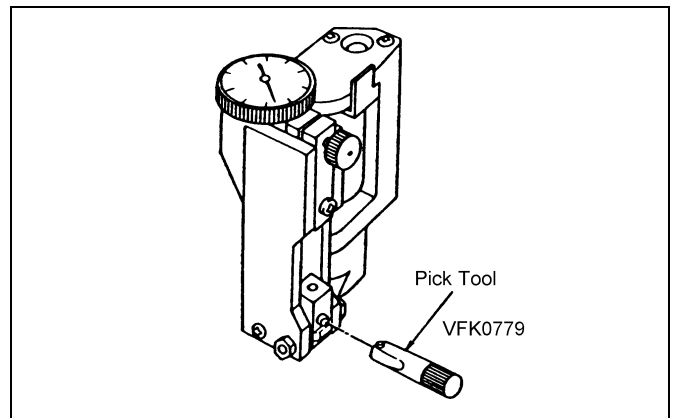
At the time of measuring the head chip protrusion, measurement must be done in contact with the head chip, and thus the height of the jig is changed. The other setup portion of this tool is the head contact portion angle.

At the time of centering adjustment, this is set to the horizontal position for smooth contact in regard to the drum surface, and at the time of measuring the head protrusion, the center drum is rotated slowly counterclockwise for contact with the head chip. This angle can be changed manually, but the pick tool (VFK0779) is useful to change this contact portion easily.

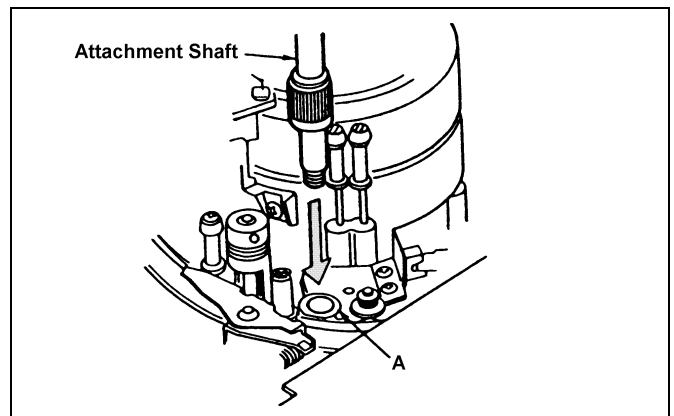
2. Turn the center knob of the attachment shaft to the right to set to the upper side.



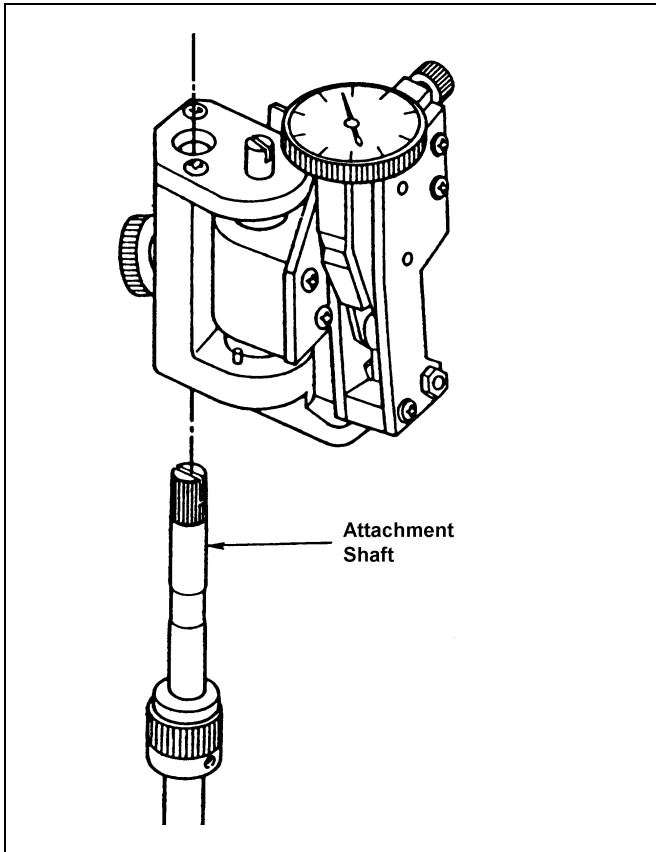
3. Set the head contact portion to the horizontal position.



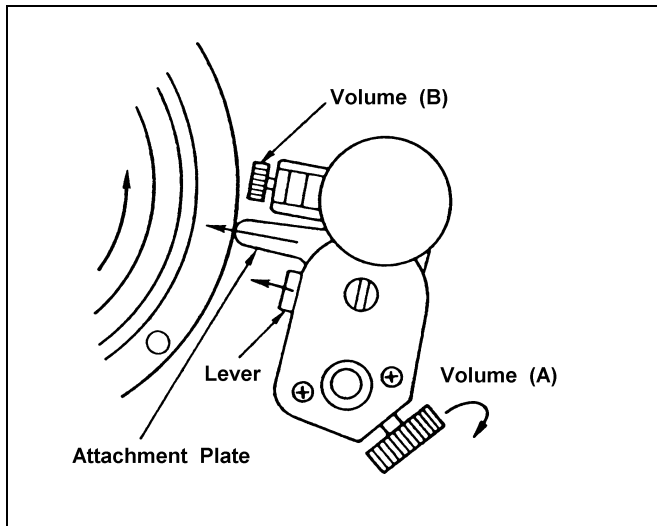
4. Install the attachment shaft at mechanism chassis



5. Confirm that the lever of center drum replacement tool is locked.

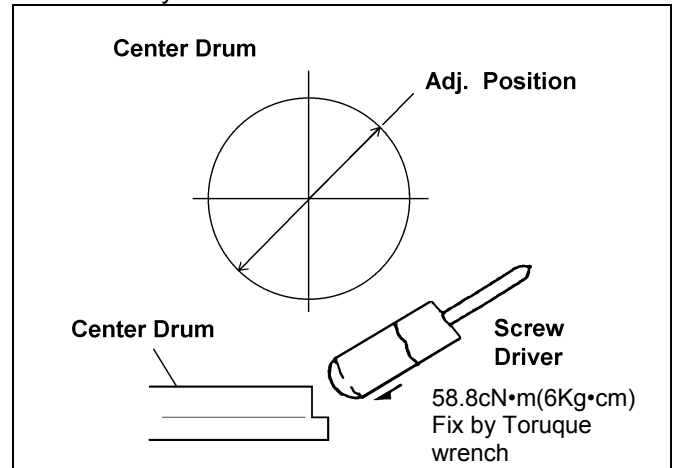


6. Set the main unit of the drum replacement tool at the attachment shaft.
7. Set the attachment plate to touch lower drum. Then turn the volume (A) to fix to the attachment shaft.

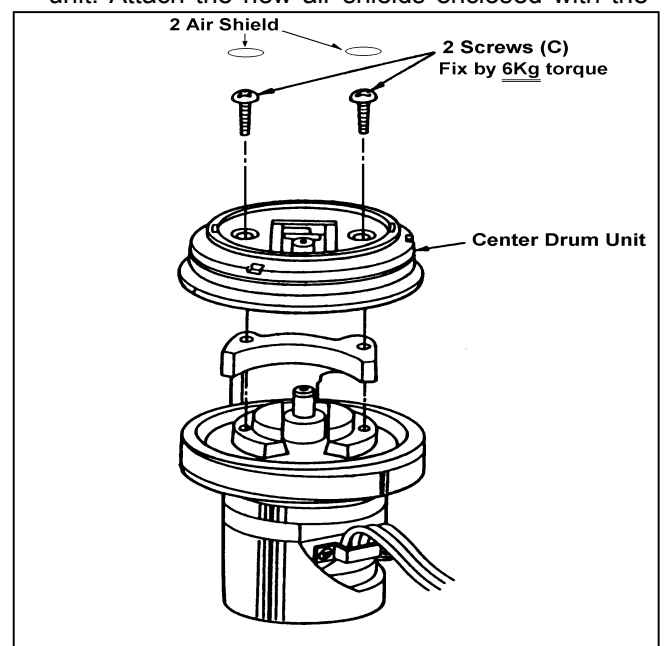


8. Rotate the outer ring of the dial gauge to set the meter indication to zero. Then adjust the head exchange plate volume (B) so that the indication becomes $60\mu\text{m}$ when the pickup part touches drum.

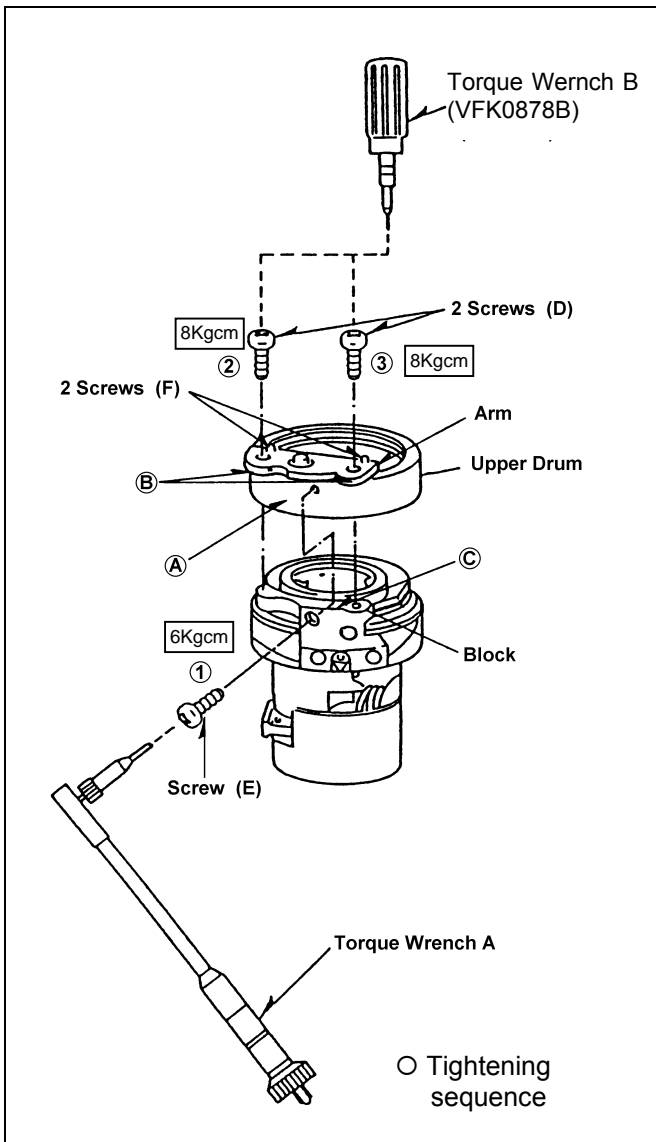
9. Rotate the outer ring of the dial gauge to set the meter indication to zero. When center drum is turned, confirm that indication of the dial gauge moves to left and right, as there is no concentricity. Adjust so that the meter indication is within $2\mu\text{m}$ (1 gradation).
10. When the dial gauge indicate the max.in counterclockwise direction, tap the edge of the shield case on the upper side of the center drum on the opposite side of the measuring point with a plastic screwdriver, so that the indication is within $2\mu\text{m}$ (1 gradation). When the indication is within the specification, slowly tighten the 2 screws (C) alternately.



11. At this time, tighten them by confirming the Dial guage indication, and if the indication is out of specification, loosen the screws again and repeat the adjustment. Repeat this procedure slowly to approach the correct setting. After the 2 screws (C) is tightened to a certain degree, perform final tightening with a torque screwdriver by $58.8\text{cN}\cdot\text{m}$ ($6\text{kg}\cdot\text{cm}$). Then confirm it again. If the indication is within $\pm 1\text{ mm}$, remove the exchange jig from drum unit. Attach the new air shields enclosed with the

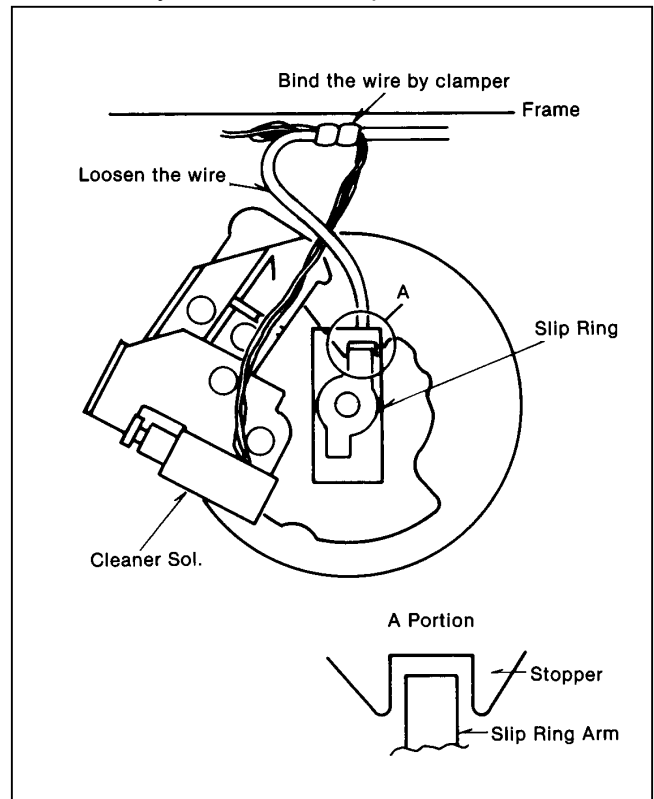


- center drum over the screw holes.
12. Remove the drum replacement tool and attachment shaft.
 13. Match the upper drum with connecting arm to the upper end surface of the connecting block, align the center of the tap hole in the upper surface of the mounting connecting block with the center of the screw hole of the connecting arm. And use the torque wrench B to tighten hex. screw (E) provisionally.
 14. Tighten 2 screws (D) provisionally.
 15. Finally tighten screw (E) with a torque of 58.8cN.m (6kg.cm) and the screws (D) with a torque of 78.5cN.m (8kg.cm).
 16. Erase the marking.

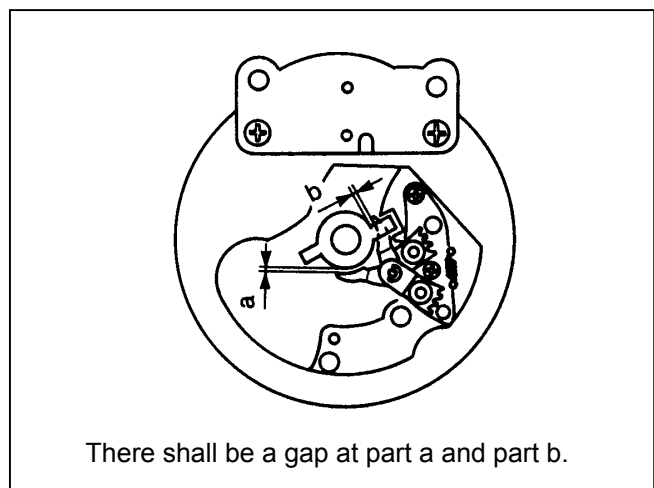


6-3. Parts Installation after Centering Adjustment

1. Install slip ring. For installation, insert slip ring into the groove in the mounting base of drum axis verticality unit as shown in portion A.



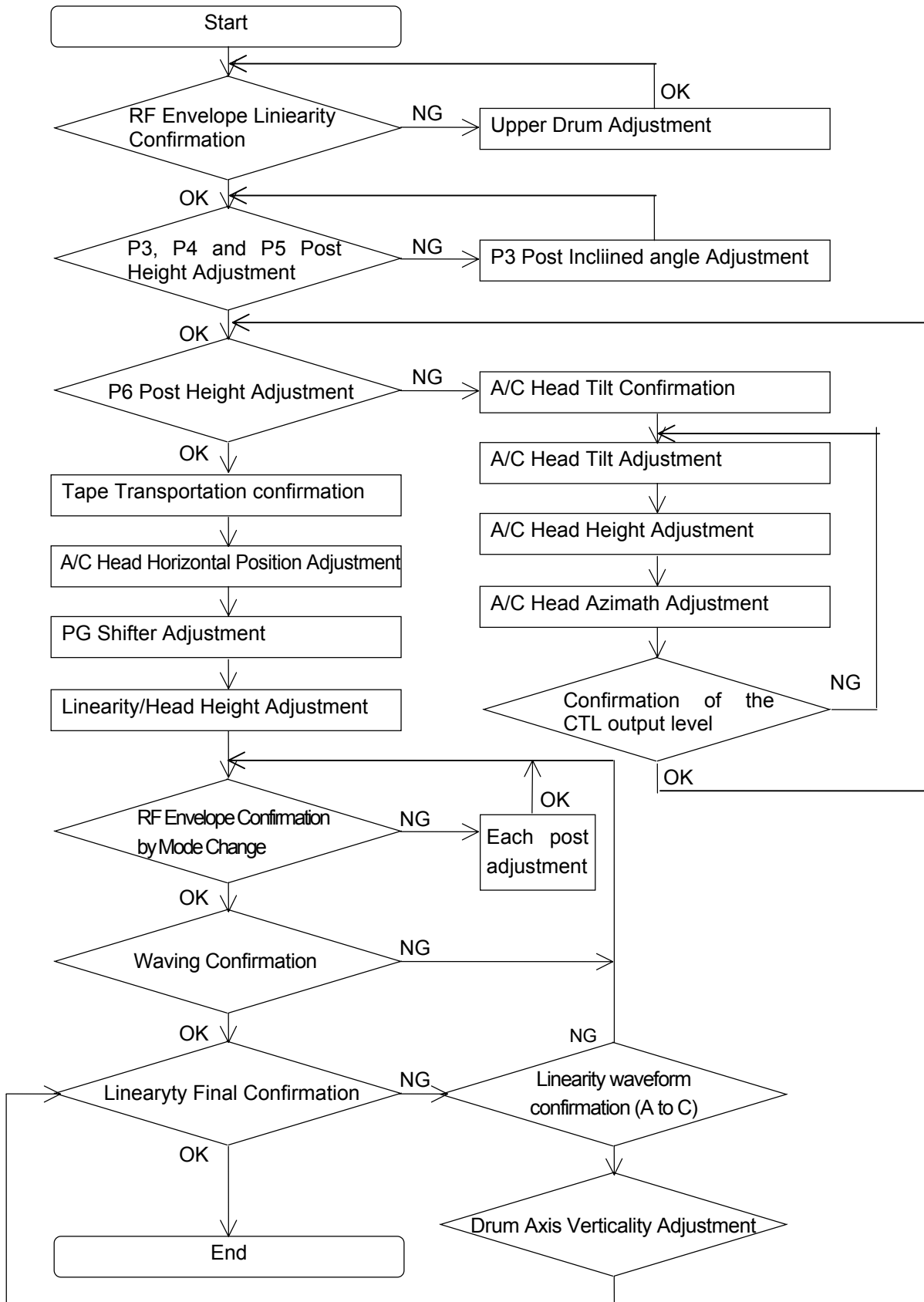
2. Install drum axis verticality unit. Install it so that there is a gap with slip ring (part a and part b).



3. Install cleaner unit and drum cover base.
4. Install Drum Cover.
5. After installation, perform wire bundling as shown in the figure on the left with the clasper to provide slack.

6-4. RF Envelope Linearity and Tape Transportation Adjustment

At the time of RF envelope linearity and tape transport adjustment, follow the flow chart below.

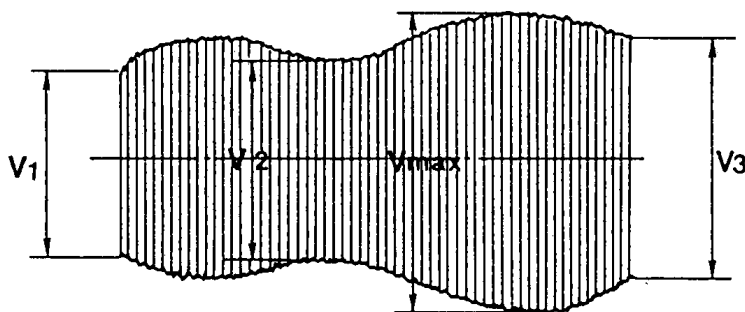


6-4-1. RF Envelope Linearity Confirmation

Specification of RF Envelope Linearity

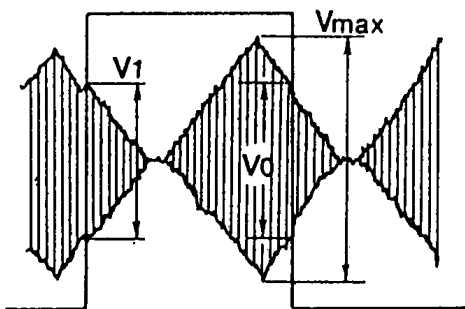
1. Confirm that the waveform of RF envelope output is in the specification shown in the following table.
2. And In VAR-1 x mode, confirm the diamond shape of envelope as shown below.
3. If it is out of the specification, confirm upper drum position and P3, P4 and P5 entrance side posts.

TP	TP308 (REC AMP), TP201 (H, SW)(REC AMP)	
MODE	Liner Master Playback VFM6081EC (0:00 - 16:00)	
	Self Recording Playback (Color bar or Monoscape)	
	At Tracking function on the Test Servo menu, to set the envelope maximum.	
TOOL	Post driver, Hex. Wrench (M2.6), Torque driver	
SPEC.	Liner Master Playback (VFM6081EC)	$V1/V_{max}, V2/V_{max}, V3/V_{max} \geq 0.92$
	Self Recording playback	$V1/V_{max}, V3/V_{max} \geq 0.9, V2/V_{max} \geq 0.95$ Waving of Envelope is less than 5% at maximum envelope portion.
	Self Recording Playback (VAR-1 x mode)	$(V1-V0)/V_{max} \geq 0.2$ V1: envelope level at H SW rising part V2: envelope level at H SW falling part
	Self Recording Playback (VAR-1 x mode)	$V1/V_{max}, V2/V_{max}, V3/V_{max} \geq 0.92$
	Confidence Playback	$V1/V_{max}, V2/V_{max}, V3/V_{max} \geq 0.85$



If out of the specification, P3,P6 and Upper drum adjustment is required as follows

V_1 : P3 post Height Adj.
 V_2 : UPPER DRUM POSITION Adj.
 V_3 : P6 post Height Adj



$V_0 \neq V_1$: P4 and P5 or Upper drum position Adj.

6-4-2. Upper Drum Adjustment

TP	TP308 (REC AMP), TP201 (HSW)(REC AMP)
MODE	Playback D3 Alignment Tape No.2 (0:00 - 16:00)
VTR	Select VAR of Tracking and set the RF envelope to the maximum.
SPEC.	RF Envelope keeps flat when the tracking VR is rotated

1. If out of the specification, loosen 2 screws (A) and (B) and push the (a), (b) and (c) portions. Then confirm the output envelope is flat.
2. Use a torque wrench to tighten 2 hex. screws (A) and (B) provisionally by 58.8cN.m (6kg.cm) while maintaining a flat envelope.
3. After confirming the linearity, use a torque screwdriver for final tightening by 78.5cN.m (8kg.cm).

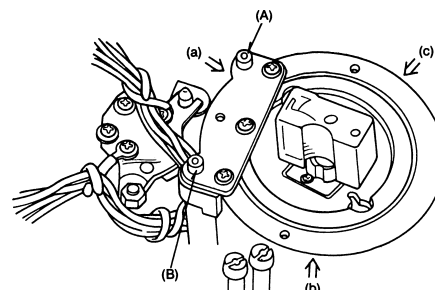
Note:

As the envelope waveform changes according to upper drum, posts P3 to P6, and the A/C head, it may not become flat by only this adjustment.

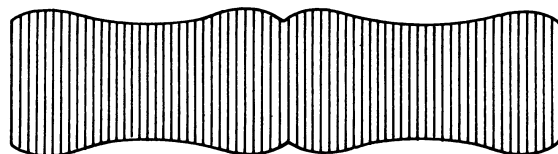
< Example >

Adjustment procedure in the case that the envelope waveform becomes good when the upper drum is pushed in direction (b)

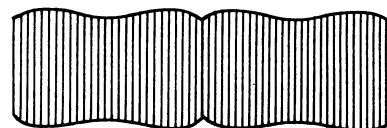
1. Loosen the hex screw (B).
2. Push part (b) until envelope waveform becomes good, and hold this condition.
3. Holding this condition, tighten the hex screw (B) with a torque of 6kg.cm.
4. Loosen the hex screw (A).
5. Push part (b) until envelope waveform becomes good, and hold this condition.
6. Holding this condition, tighten the hex screw (A) with a torque of 6kg.cm.
7. After confirming the linearity, perform final tightening of 2 hex. screws (A) and (B) with a torque of 8kg.cm.



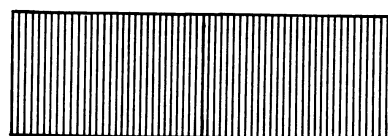
REC AMP TP308



When upper drum is not center, middle portion of output envelope goes down



↓ (a), (b) or (c)

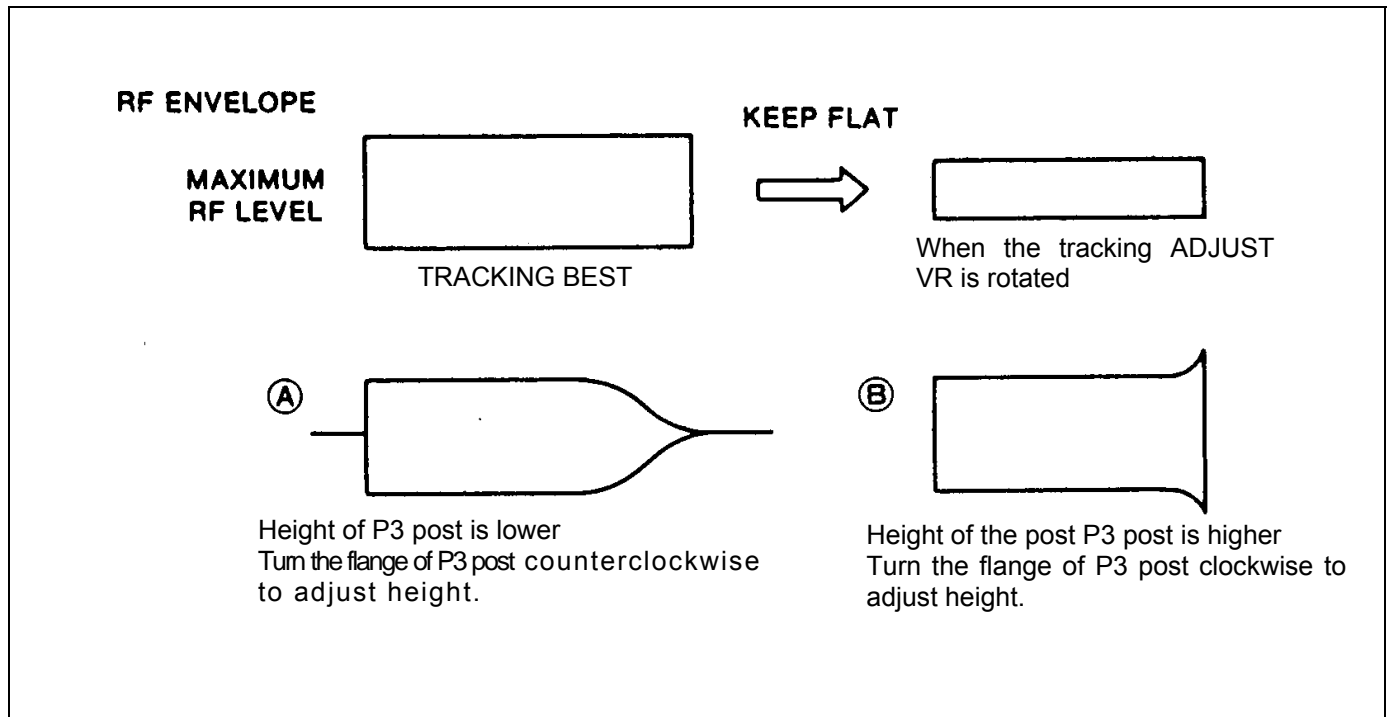


When envelope output becomes flat as shown in the above figure, tighten the hex screws (A) and (B).

6-4-3. P3 Post Height Adjustment

TP	TP308 (REC AMP), TP201 (HSW)(REC AMP)
MODE	Playback D3 Alignment Tape No.2 (0:00 ~ 16:00) (Confirmation)
VTR	Select VAR of Tracking and set the RF envelope to the maximum.
SPEC.	RF Envelope keeps flat when the tracking VR is rotated

1. If the envelope linearity is out of the specification., adjust post P3. Perform P3 post adjustment in READY OFF condition of STOP mode to prevent tape damage.
2. Set torque of screwdriver to 24.5cN.m (2.5kg.cm).
3. Set P4 and P5 to no limit (Free)
4. Adjust P3 post as shown in figure.
5. Confirm that RF envelope keep flat when the Tracking VR (ADJUST VR) is rotated in PLAY mode.
6. After adjustment of P3 post, tighten upper flange with a torque of 24.5cN.m (2.5kg.cm). Afterwards, perform post limit adjustment of P4 and P5 post.
7. If still out of the specification, confirm P3 post inclined angle adjustment.



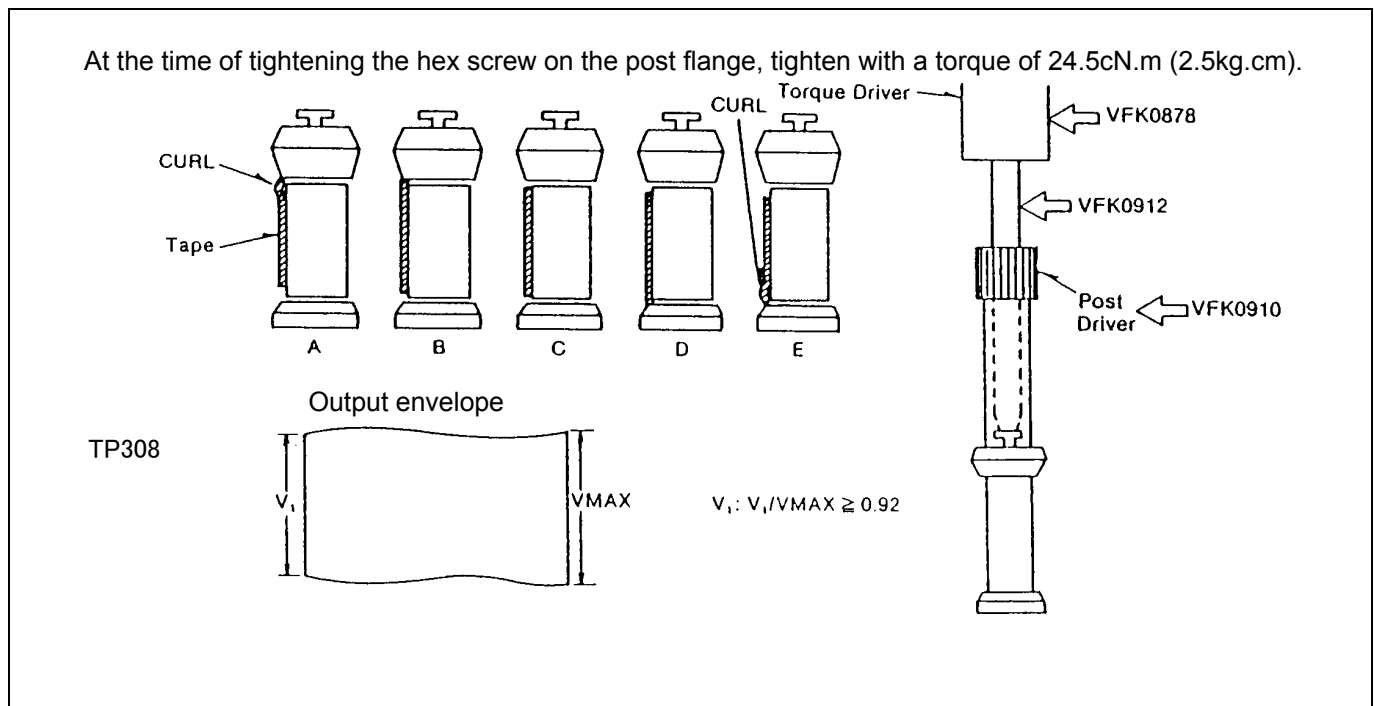
6-4-4. P4, P5 Post Height Adjustment

TP	TP308 (REC AMP), TP201 (HSW)(REC AMP)
MODE	Playback VFM6081EC No.2 (0:00 ~ 16:00)
TOOL	Post driver, Dental Mirror
SPEC.	Output envelope is flat

	LIMIT (PLAY MODE)	TAPE HEIGHT					ADJUSTMENT
		A	B	C	D	E	
P4 POST	Intermediate limit			○			Move upper flange to touch tape without tape curl etc. and move it up by 0.2mm from there (1/2 turn).
P5 POST	Upper Limit		○				Just move upper flange to touch tape without Tape curl.

Notes:

- For the adjustment of P4 and P5 post, pay attention to the entrance side and the exit side of the waveform and do not change the envelope waveform.
- After completion of the above adjustment, confirm that the hex screw on the post flange is tightened with a torque of 24.5cN.m (2.5kg.cm).



- In VAR x -1 and VAR x -2 mode, confirm that there are no curl on the tape at the upper and the lower side of P2 and P3 post.
- In FF and REW mode, confirm that there are no curl on the tape at the upper and the lower side of P2 and P3 post.
- If tape curl is occurred in the above modes, adjust height of P4 and P5 post until curl is disappeared

6-4-5. P6 Post Height Adjustment

TP	TP308 (REC AMP), TP201 (HSW)(REC AMP)
ADJ.	P6 post
MODE	Select VAR of Tracking and set the RF envelope to the maximum.
TAPE	VFM6081EC No.2 (0:00 ~ 16:00)
TOOL	Post driver
SPEC.	RF Envelope keeps flat when the ADJUST VR is rotated

<Step 1>: VTR condition setting

<Step 2>

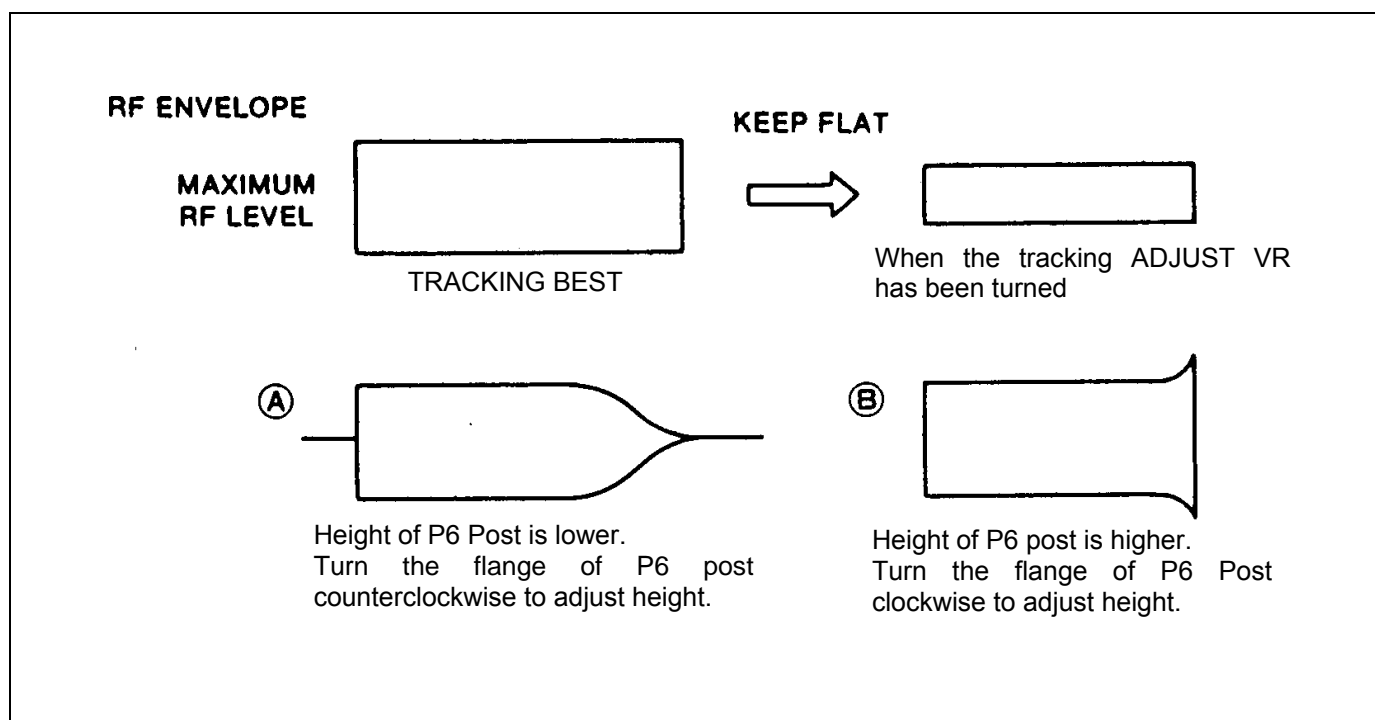
1. Playback an alignment tape.
2. At the time of adjustment of the tracking with the tracking VR (ADJ VR), confirm that the envelope drops in parallel.
3. If the result becomes (A) or (B) as shown in the figure, adjust height of P6 post.

<Step 3>

1. After adjustment, confirm that no curl etc. are at upper edge of tape at the flange of P6 post.
2. If there is curl, adjust height of P6 post again.

Note:

If it is out of the specification, confirm that the A/C Head tilt adjustment.



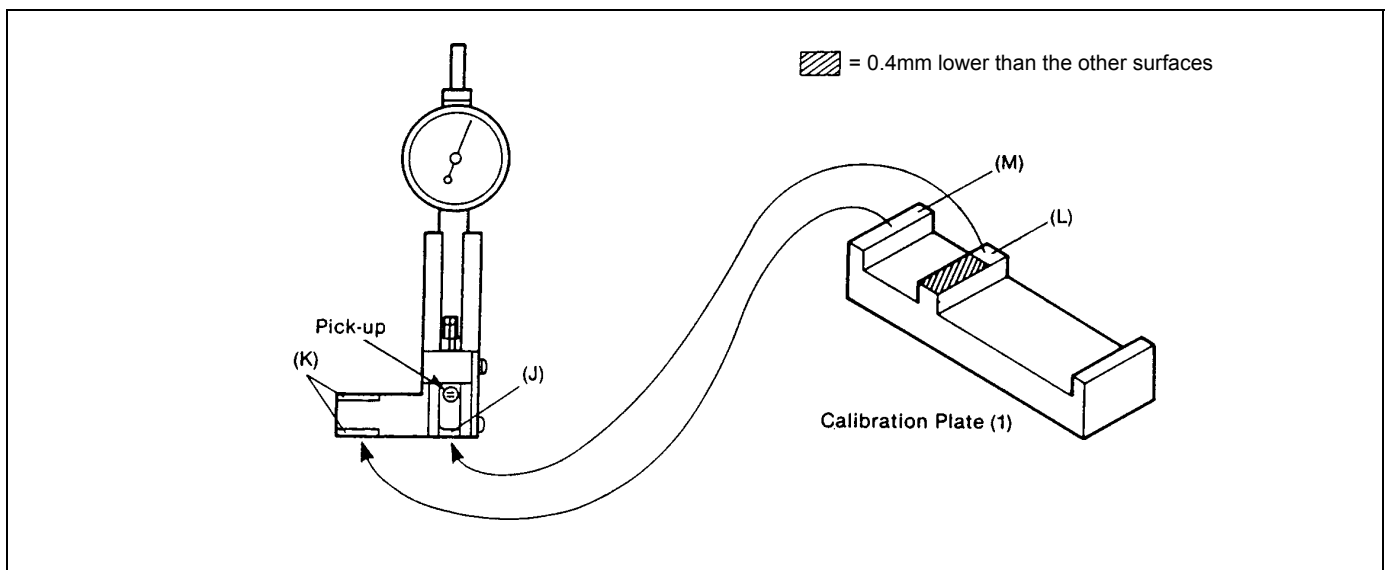
6-4-6. A/C Head Tilt Confirmation

Before adjusting A/C head, confirm A/C head tilt according to the following procedure. This confirmation with use of tilt adjustment tool is done to judge whether head tilt adjustment is required or not. After A/C head adjustment, perform final confirmation for CUE audio level, CTL level, and RF envelope linearity.

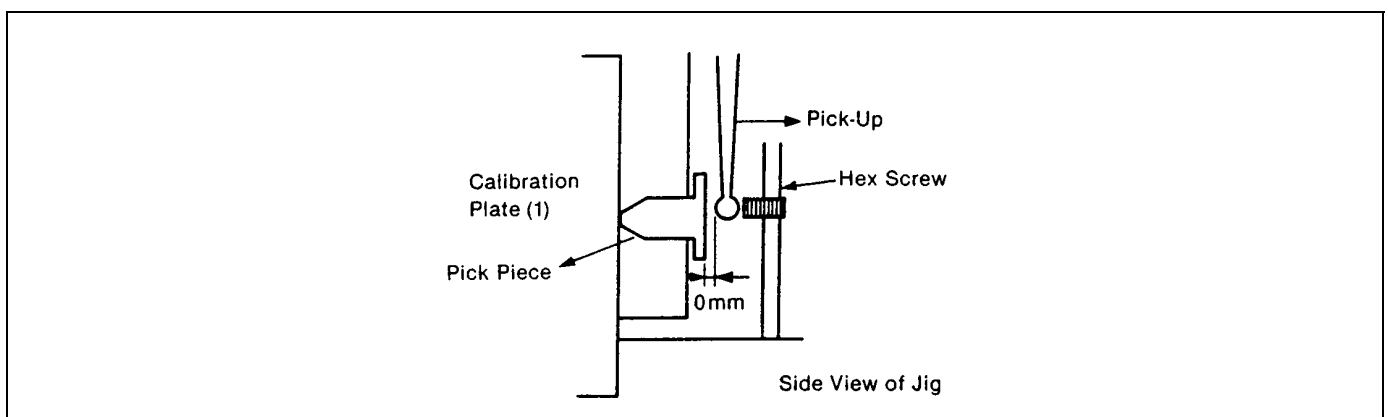
Tool list : A/C Head Tilt Tool (VFK1008)
 Calibration Plate (1) (VFK1007)
 Calibration Plate (2) (VFK1177)

1. Calibration Procedure

1. Attach calibration plate (1) to A/C Head Tilt Tool as shown below. (J and L, K and M should touch each other)

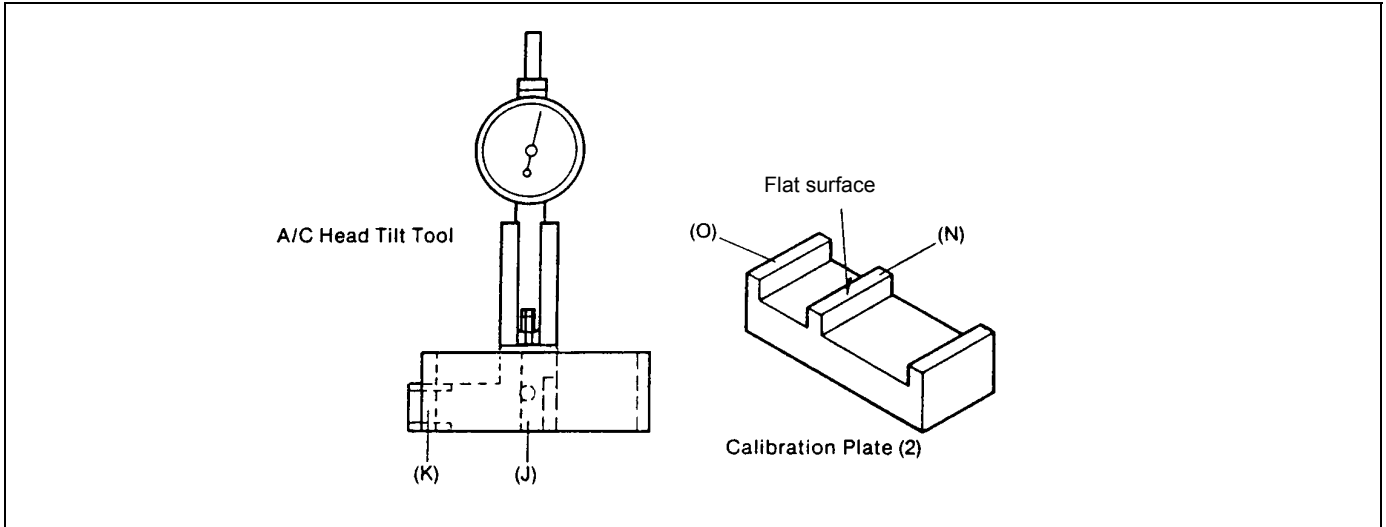


2. Gently press Pick Piece of A/C Head Tilt Tool from rear side so that pick piece is protruded from reference surface about 0.4mm with calibration plate (1) as shown below.



3. Turn the Hex screw clockwise so that Pick-up touches pick piece slightly. Then turn Hex screw two turn counterclockwise.

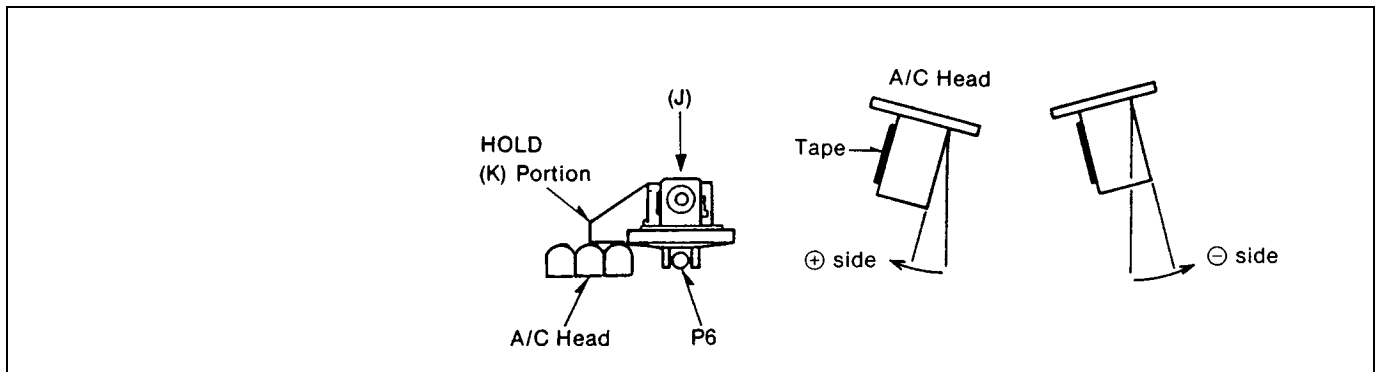
4. Attach calibration plate (2) to A/C Head Tilt Tool as shown below. (J and N, K and O should touch)



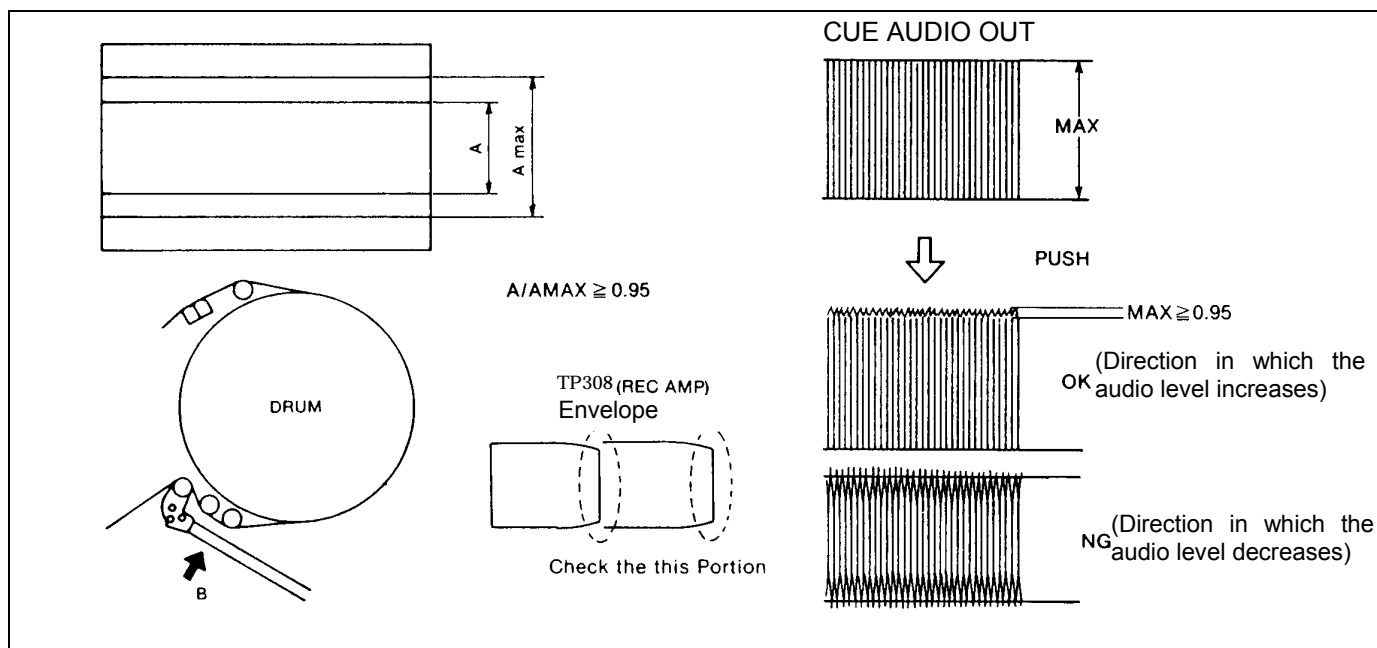
5. Hold (K) portion and gently press at (J) to set dial gauge reading to "0".
6. Remove Calibration Plate (2) and confirm that gauge reading is $-300\mu\text{m} \sim -500\mu\text{m}$ with no pressure.
7. If it is not, repeat step 1. ~ 5 until gauge reading is $-300\mu\text{m} \sim -500\mu\text{m}$.

2. Measuring Procedure

1. Gently install A/C Head tilt tool onto P6 Post.

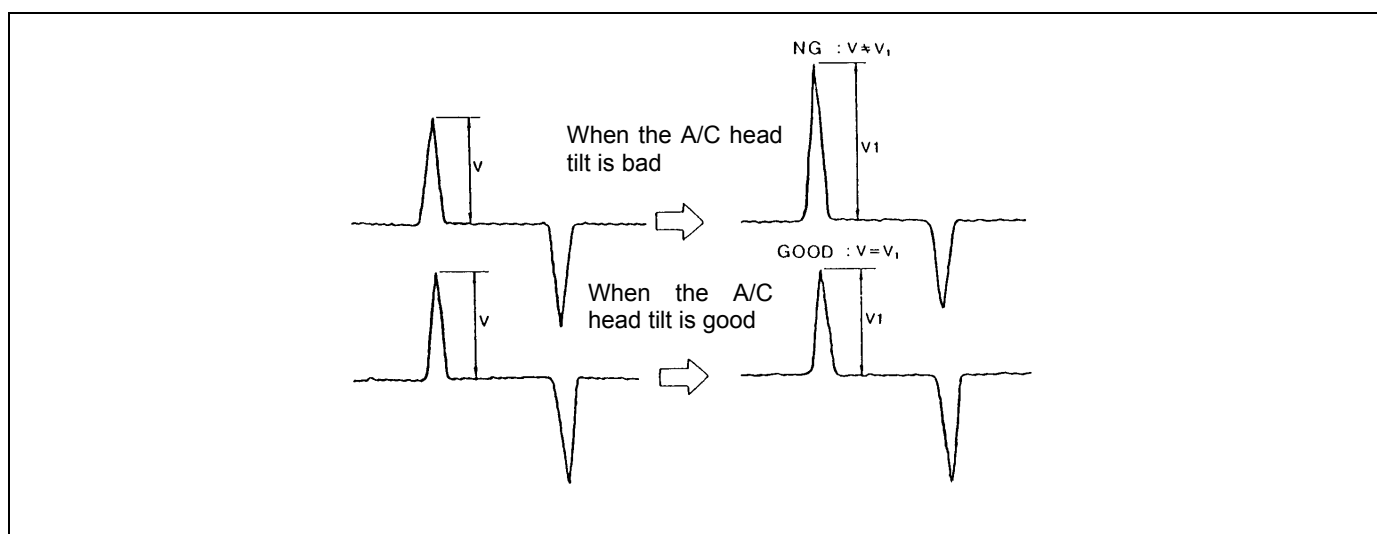


2. Hold (K) portion as reference and gently press (J) portion to measure tilt reading.
3. Confirm that gauge reading is $\pm 50\mu\text{m}$.
4. If it is not, refer to the following A/C Head Adjustment Procedure.



<STEP 3> A/C Head Height Confirmation

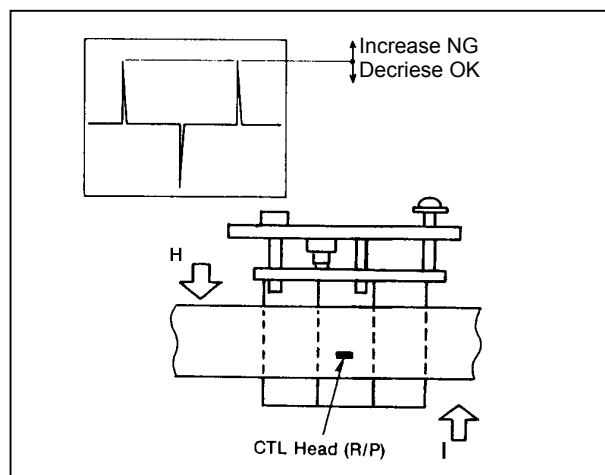
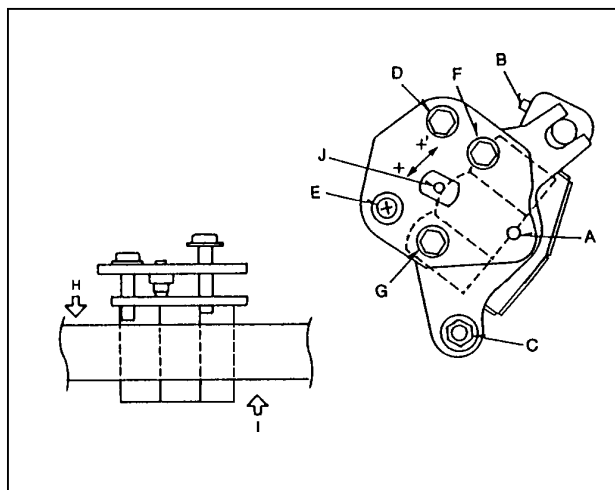
1. Oscilloscope connection CH1 : P2002-10C (M1:SYS/SRV)
2. Play linear part (0:00 to 16:00) of D3 alignment tape No. 2 and confirm that CTL level is at the maximum.
3. Confirm that CTL level is a maximum. For confirmation, push tape edge (a) and (b) at both sides of A/C head lightly and confirm a decreasing tendency of CTL level.
4. If CTL level is increase, loosen hex screw B and adjust by turning nut C so that CTL level becomes a maximum.



6-4-8. A/C Head Height Adjustment

TP	P2002-10C (M1:SYS/SRV), CUE AUDIO OUTPUT (Rear panel)
ADJ.	Hex. Screw (B), Nut (C)
MODE	PLAY
TAPE	VFM6081EC No.2 (0:00 ~ 16:00)
M.EQ.	Oscilloscope
TOOL	Hex. wrench(M3), Nut driver(M4)
SPEC.	CTL output level becomes a maximum

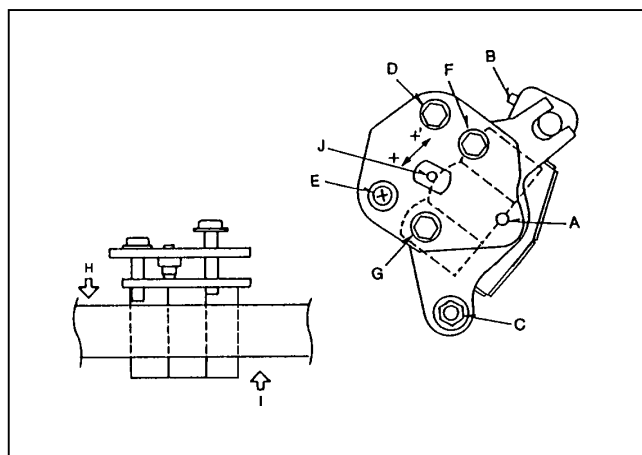
1. Connect P2002-10C to CH1 and connect cue audio output to CH2 of oscilloscope.
2. Loosen hex. screw "B" slightly.
3. Touch tape gently "H" and "I" portion as shown in figure.
4. If CH1 (CTL) level increase by touching "H" portion, rotate screw "C" counterclockwise.
5. If CH1 (CTL) level increase by touching "I" portion, rotate screw "C" clockwise.
6. After the adjustment, touch (H) and (I) portion as shown in the figure and confirm that the cue level is a maximum.
7. After the adjustment, tighten hex. screw "B".



6-4-9. A/C Head Azimuth Adjustment

TP	CUE AUDIO OUTPUT (Rear panel))
ADJ.	Screw (D)(E)
MODE	PLAY
TAPE	VFM6081EC No.2 (0:00 ~ 16:00)
M.EQ.	Oscilloscope
TOOL	Torque wrench (VFK0878, VFK0920)
SPEC.	CUE audio output level becomes a maximum

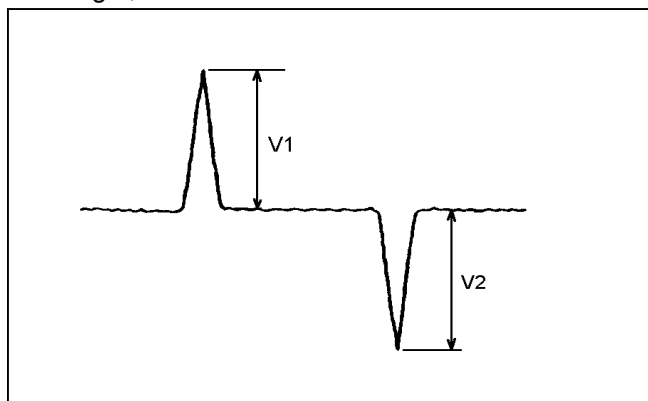
1. Connect scope to cue audio output.
2. Loosen screw (E) by 1/4 of a turn.
3. Play master tape (VFK6081EC).
4. Rotate hex. screw "D" so that cue audio level is maximum.
5. Tighten screws (E) and (D) alternately so that audio level does not drop. At this time, tighten screw (E) with a torque wrench to $39.2\text{cN.m} \pm 9.8\text{cN.m}$ ($4 \pm 1\text{kg.cm}$).
6. After the adjustment, touch locations (H) and (I) as shown in the figure and confirm that the level is a maximum.



6-4-10. CTL Output Confirmation

TP	Play and Self Rec. Play: P2002-10C (M1:SYS/SRV)
	Conf. Play: P2002-11C (M1:SYS/SRV)
MODE	PLAY
	Confidence Playback
	Self Recording Playback
TAPE	VFM6081EC No.2 (0:00 ~ 16:00)
	Blank Tape
SPEC.	PLAY: $V_1, V_2 \geq 0.35$ [V]
	Conf. Play: $V_1, V_2 \geq 0.3$ [V]
	Self Rec. Play: $V_1, V_2 \geq 0.36 \pm 0.06$ [V]

1. Confirm that CTL level is in the specification at those modes.
2. If out of the specification., readjust A/C head tilt, height, and azimuth.

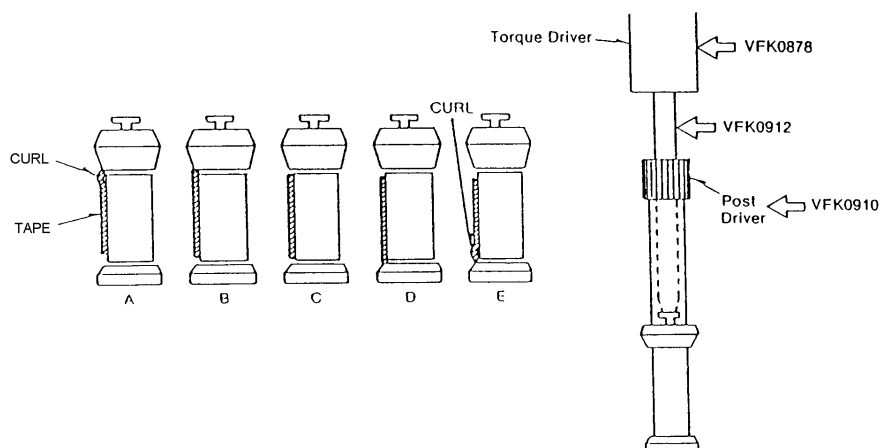


6-4-11. P7, P8 ,P9 and P10 Post Height Adjustment

TP	Self recording tape
MODE	PLAY, VAR \times -1, VAR \times 2
SPEC.	Post driver, Dental mirror

	LIMIT (PLAY)	TAPE HEIGHT					ADJUSTMENT
		A	B	C	D	E	
P7 POST	Free			○			Adjust P7 post to lower limit and then down upper flange by 0.15mm (3/8 of a turn).
P8 POST	Upper limit		○				Just touch upper flange.
P9 POST	Free		○	○	○		Set VAR -1X. Adjust P9 post so that tape curl does not appear at P7 lower flange.
P10 AND P11 POST	Free		○	○	○		Adjust P10 and P11 so that the tape curl will not appear at P9, P10, P11 posts when changing VAR \times -1 to VAR \times 2.

Tighten hex screws on post flanges with a torque of 24.5cN.m (2.5kg.cm).



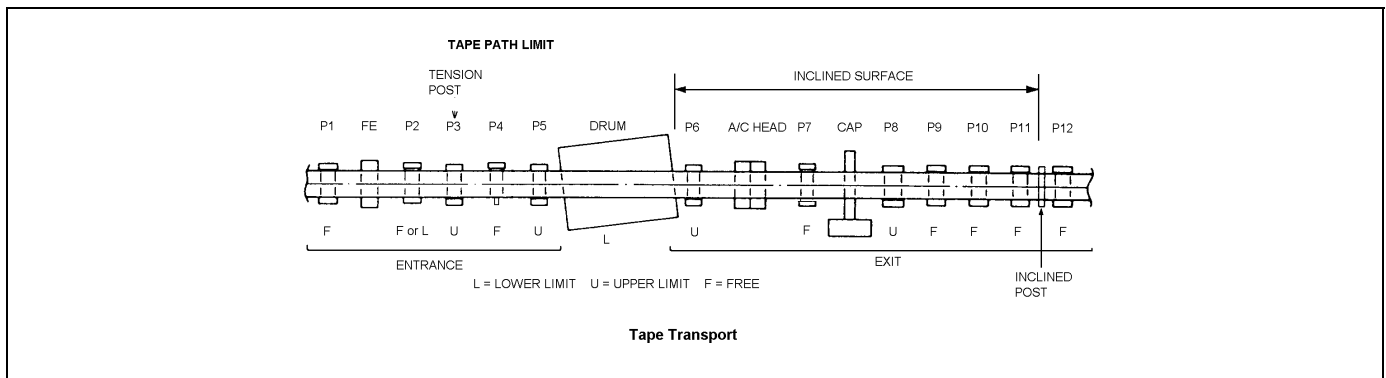
Notes:

1. When height of P7 post is miss-adjusted, envelope waving or impaired audio level stability may be occurred.
2. Depending on the strength of limit at P8 post, tape curl may be occurred at posts P6 and P7 at the REW.
3. As post P9 to P11 are related to tape damage at the time of loading and unloading, lower limit should not be made stronger than required.
4. After completion of the above adjustment, confirm that hex screws on post flanges are tightened with a torque of 24.5cN.m (2.5kg.cm)

6-4-12. Tape Transportation Posts Limit Position Confirmation

Posts limit position table (The post tightening torque is 24.5cN.m (2.5kg.cm).)

Name	Limit	Adjustment
P1 Post	Free	The position where both tape edge doesn't touch flanges. (The post height adjustment tool is reference.)
P2 Post	Free	The position where both tape edge doesn't touch flanges. (The post height adjustment tool is reference.)
P3 Post	Upper Limit	The entrance side of envelope shall become flat in Play mode.
P4 Post	Free	The position 0.2mm upper from the condition that the upper edge of tape touch flange in play mode.
P5 Post	Upper Limit	The upper edge of tape is limit in play mode.
P6 Post	Upper Limit	The envelope shall become flat in play mode.
P7 Post	Free	The position 0.15mm lower from the condition that the lower edge of tape touch flange in play mode.
P8 Post	Upper Limit	The upper edge of the tape is limit in all modes.
P9 Post	Free	The position shall be free in play mode. The lower edge of tape is limit in reverse play mode.
P10 Post	Free	The position shall be free or the lower edge of tape shall be limit in play or reverse play mode.
P11 Post	Free	The position shall be free or the lower edge of tape shall be limit in play or reverse play mode.
P12 Post	Free	The position where both tape edge doesn't touch flanges. (The post height adjustment tool is reference.)



<STEP 1>

1. Insert a recorded tape and play it.
2. Confirm that post limit for P1 to P12 is performed as shown in the above figure and that there is no curl at both tape edges at each flange.

<STEP 2>

1. In VAR x -1 mode.
2. Confirm that there is no curl at the lower edge of tape at the lower flange part of P7post.
3. If there is curl, adjust height of P9 post to be no curl at the tape edge on the lower flange part of post P7.
4. Confirm that there is no curl at the lower edge of tape at the lower flange part of post P9.

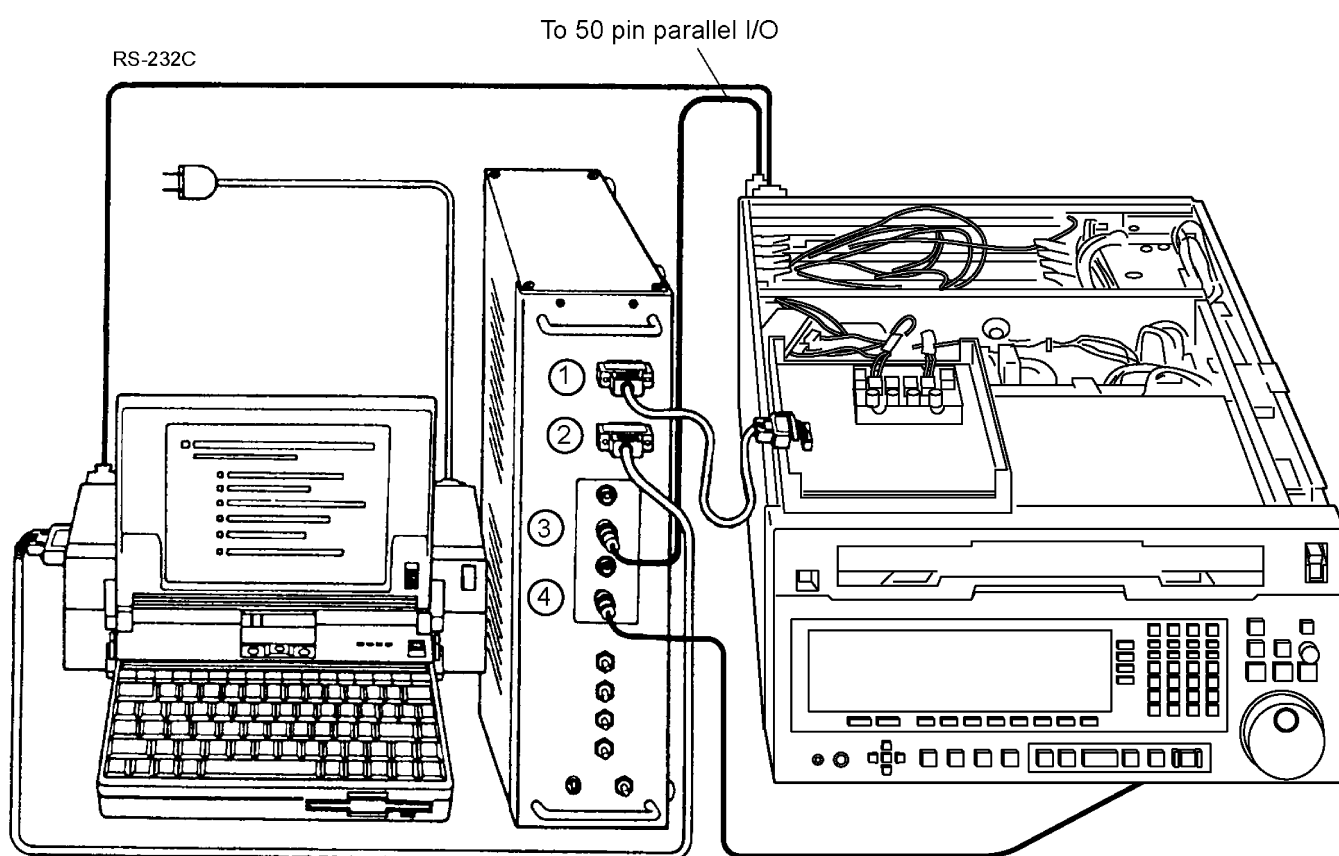
<STEP 3>

1. In VAR x -1 to VAR x 2 mode.
2. Confirm that there is no curl at the lower edge of tape at the lower flange part of post P9, P10, and P11.
3. If there is curl, adjust the flanges of P10 and P11 post to be no curl at the tape edge at the posts P9, P10, and P11.

6-5. Linearity and Head Height Adjustment

Linearity/HEAD Height Adjustment Tool connection

- ① To head amp box
- ② To Comp. A/D
- ③ To 50pin parallel I/o
- ④ To M1 board TP11



(1) Using tape

①. D3 Alignment tape No.3 (VFM6086EC), ②. D5 Alignment tape No.4 (VFM5080JR), ③. D5 recording tape

(2) Tools

AT HSW (BNC-IC Clip) → M1 Board TP11
FE HEAD A/B → Not used
CUE REC L (BNC-50P Cable) → Parallel I/O (50P)
FRAME PULSE → Not used
OUTPUT (15P Long) → AD Board
REC HEAD (15P Short) → Head Amp (Box)

(3) HEAD AMP Box

Drum connector (Green) → CN86 (Green) HEAD AMP (Box)
Drum connector (Red) → CN85 (Red) HEAD AMP (Box)
HEAD AMP Box Cable (Green) → P302 (Green) REC AMP (VTR)
HEAD AMP Box Cable (Red) → P304 (Red) REC AMP (VTR)

(4) Switches

POWER : ON/OFF
MODE : LINEARITY (Linearity)
HEAD HEIGHT (Head height)
PAL/NTSC : PAL/NTSC
A/D TORIGGER : PC-AT
REC HEAD : D3 studio/D5, D3 portable

(5) RS232C Communication

Change the settings in the SET UP I/F menu as follows.

RS-232C : ON/OFF
BAUD RATE : 9600
DATA LENGTH : 7
START BIT : 1
STOP BIT : 1
PARITY : ODD

(6) Software

Ver. 7.0 software is required to adjust the AJ-HD3700H linearity and head height.

Panasonic Digital VTR
Linearity & Head Height Measurement Software
Quatech Version 7.0

Tool : D3/D5 Tool

[1] AJ-D350
[2] AJ-D351
[3] AJ-D580
[4] AJ-D340
[5] AJ-D310
[6] AJ-D320
[7] AJ-D321
[8] AJ-D360
[9] AJ-D300
[10] 309010001

[A] Linearity

[B] REC Head
[C] FE Head

Select Command

[S] Start

[T] Tool Selection
[Q] Quit

SELECT : Cursor [Up] [Down] / [Right] [Left]
EXECUTE : [ENTER]
ESCAPE : [ESC]

1. When you insert the Ver. 7.0 floppy disk into the computer disk drive and read the disk, the above screen will be displayed.
2. Move the cursor to "[T] Tool Selection" and hit the ENTER key.
3. Select D3/D5 TOOL in the TOOL SELECT menu and hit the ENTER key.

6-5-1. Linearity Adjustment

<Linearity Adjustment>

1. Open the HD3700H TEST SERVO menu and simultaneously press **F9** (MECHA) and **F13** (ADJ ENABLE) keys. Move the cursor to MECHA display part and select LINEAR with the cursor key.
2. Select the AJ-D580 LINEARITY menu in the MAIN menu of Linearity/Head height software.
3. Select the serial No. of the D3 ALIGNMENT TAPE (No.3). If the alignment tape data is not stored, press **ESC** key to go to linearity menu, and input the data in the <T> ALIGNMENT TAPE menu.
4. Play the Alignment Tape and hit <S> key to start a measurement.
5. A line which shows linearity is displayed on screen. If left side of the line drops, turn P3, P4, and P5 posts slightly clockwise and then push upper edge of the tape down at entrance side of drum.

CAUTION:

Do it in STANDBY mode when adjusting P3 - P5 post position to avoid tape damage.

If right side of the line drops, turn P6 post slightly clockwise, and then push upper edge of the tape down at exit side of drum.

On the other hand, if left side of the line rises, turn P3, P4, and P5 post slightly counterclockwise, to down the line. And if right side of the line rises, turn P6 post slightly counterclockwise, to down the line.

Several horizontal lines on display is 1 μ m/div.

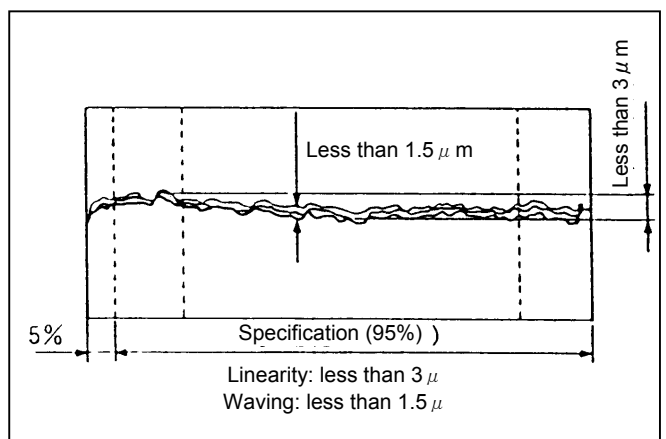
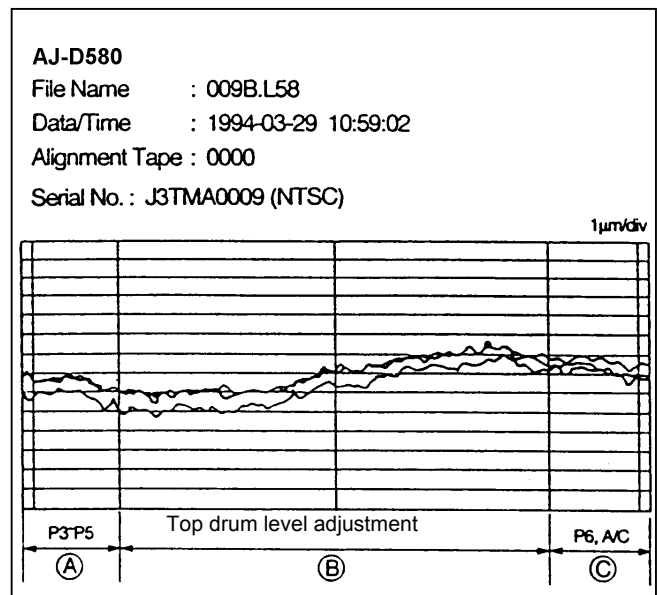
If the DC voltage is offset at the start of measurement, by hitting BS key DC voltage offset is automatically canceled. If it doesn't, confirm X value.

6. Center portion of the line can be straightened by upper drum level adjustment.
7. If the line is almost straight, hit the SPACE key.
8. 30-second later, the picture as shown in right figure is displayed on the CRT.
9. If the line is out of the specification, return to step 5 and repeat the procedure.
10. If the line is within the specification, eject the tape and then reload it and repeat the measurement at a different portion of the tape. If the second measurement is also within the specification, then the linearity is good.

```

LINEARITY [AJ-D580]
=====
QUATECH Ver. 7.0
D3/D5 TOOL

<S> MEASUREMENT START
<D> DATA SAVE / LOAD  [C:\]
<T> ALIGNMENT TAPE     [0000(NTSC)]
<P> PEAK HOLD CHANGE [30s]
<R> RS-232C on/off      [off]
<I> INSTRUCTION
<Q> QUIT
  
```



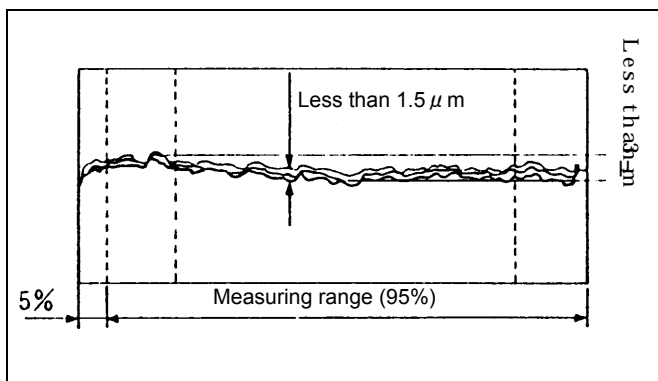
6-5-2. Specification of Linearity Adjustment

[1] Linearity Adjustment Procedure

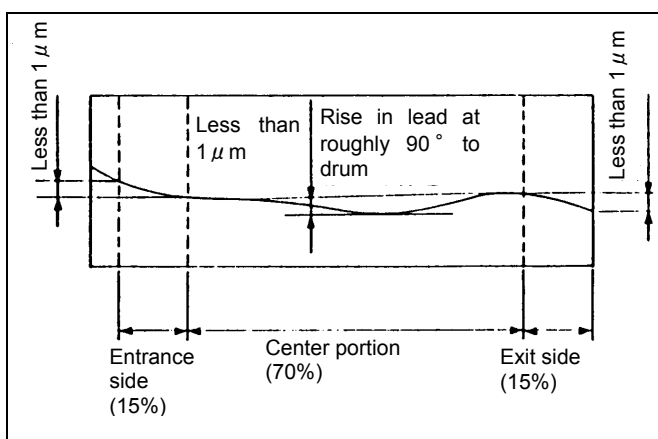
- ① Adjust the linearity with D3 linearity/head height adjustment fixture.
- ② The specifications are indicated below.

Note:

The measuring range is the area shown in the figure below.



- A. Linearity within the measuring range when PEAK HOLD is OFF: less than $3 \mu\text{m}$.
- B. Waving throughout the entire measuring range when PEAK HOLD is ON: less than $1.5 \mu\text{m}$.
- C. Partial linearity at entrance side, center portion and exit side when PEAK HOLD is OFF: less than $1 \mu\text{m}$ within the range shown in the following diagram.



- ③ If it is out of the specifications, adjust the linearity and waving according to the following procedure.
 - A. If the linearity at the entrance side is bent, adjust P3, P4, and P5 post height.
 - B. If the linearity at the exit side is bent, adjust P6 post height.
 - C. If there is waving at the entrance side, adjust P3, P4, and P5 post height.
 - D. If there is waving at the exit side, adjust tilt of A/C head (in direction to improve CTL head contact).
 - E. If the center portion of the line is sagging, adjust upper drum level at around 90° of the drum. (Refer to Upper Drum adjustment procedure.)

[2] Linearity Confirmation after Adjustment

- ① After linearity and waving adjustment with azimuth time difference fixture, confirm linearity and waving by the following procedure.

Note: Confirm linearity and waving by REC head output obtained to oscilloscope from azimuth time difference fixture head amp.

- A. No change in linearity when the VTR mode is switched from REW to PLAY (linearity returns to original within 0.5sec).
- B. Linearity within measuring range when PEAK HOLD is OFF: less than $3 \mu\text{m}$
- C. Waving throughout the entire measuring range when PEAK HOLD is ON: less than $1.5 \mu\text{m}$.
Partial linearity at entrance side, center portion and exit side when PEAK HOLD is OFF: less than $1 \mu\text{m}$.
Each point at the entrance side, center portion, and exit side must be horizontal (within $1 \mu\text{m}$ range).
No change even when P3 post is hit slightly toward you with your finger (post returns to original position within 0.5sec).
Confirm that tape is not damaged.

- ② Confirm that the guide post A/C head is securely fixed as follows.
 - A. Tighten all guide post screws and flanges with the stipulated torque. (Required for new flanges only.) Stipulated torque: $24.5 \pm 4.9 \text{cN} \cdot \text{m}$ ($2.5 \pm 0.5 \text{Kg} \cdot \text{cm}$)
 - B. After adjusting A/C head height, tighten the locking screw with the stipulated torque. Stipulated torque: $78.5 \pm 9.8 \text{cN} \cdot \text{m}$ ($8 \pm 1 \text{kg} \cdot \text{cm}$)
 - C. After adjusting the A/C head X value, tighten the locking screw with the stipulated torque. Stipulated torque: $39.2 \pm 9.8 \text{cN} \cdot \text{m}$ ($4 \pm 1 \text{kg} \cdot \text{cm}$)
 - D. After adjusting A/C head tilt and azimuth, confirm the locking screw (in spring) for looseness.
 - E. Apply lock-tight to all screws.
 - F. After pressing A/C head with $29.4 \text{cN} \cdot \text{m}$ ($3 \text{kg} \cdot \text{cm}$), reconfirm X value and make sure it has not changed.

6-5-3. REC Head Height Adjustment

<A Measurement>

1. Set VFK0832A switch to HEAD HEIGHT position.
2. Open SET UP I/F menu and set RS-232C to ON and open AUTO EDIT menu and set SET UP Tracking to Fix.
3. Select AJ-D580 REC HEAD menu in MAIN menu.
4. Select serial No. of ALIGNMENT TAPE (No.4 color bar). If alignment tape data is not stored, hit **ENTER** key to go to REC HEAD HEIGHT menu, and input data in <T> ALIGNMENT TAPE menu.
5. Select <H> HEAD WIDTH DATA and enter the number written on center drum. If that number is not entered, the default data can be used.

REC HEAD HEIGHT [AJ-D580]

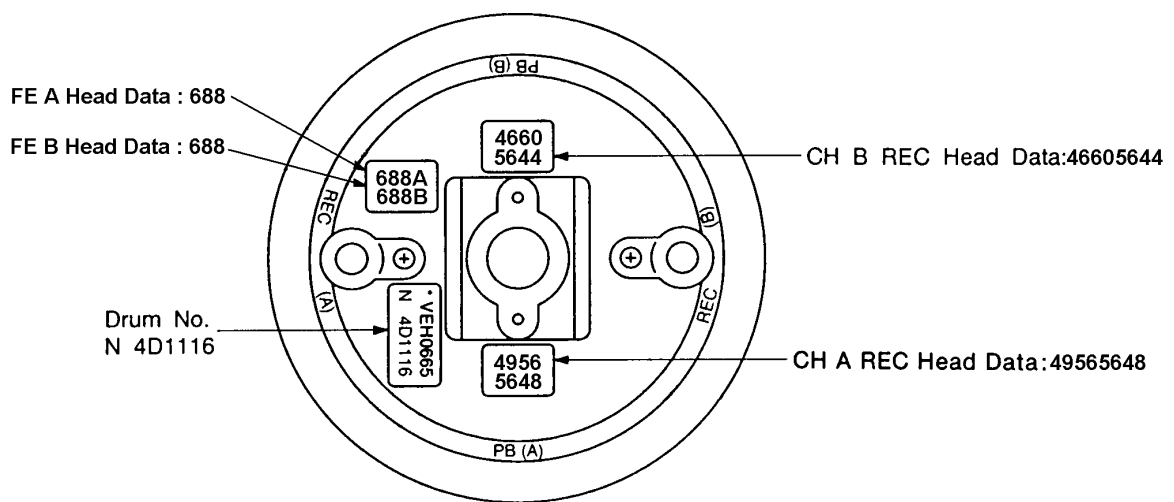
```
=====
                                QUATECH Ver. 7.0
                                D3/D5 TOOL

<S> MEASUREMENT START
<D> DATA SAVE / LOAD   [C:\]
<H> HEAD WIDTH DATA    [Default]
<T> ALIGNMENT TAPE      [0000]
<M> MONITOR
<I> INSTRUCTION
<Q> QUIT
```

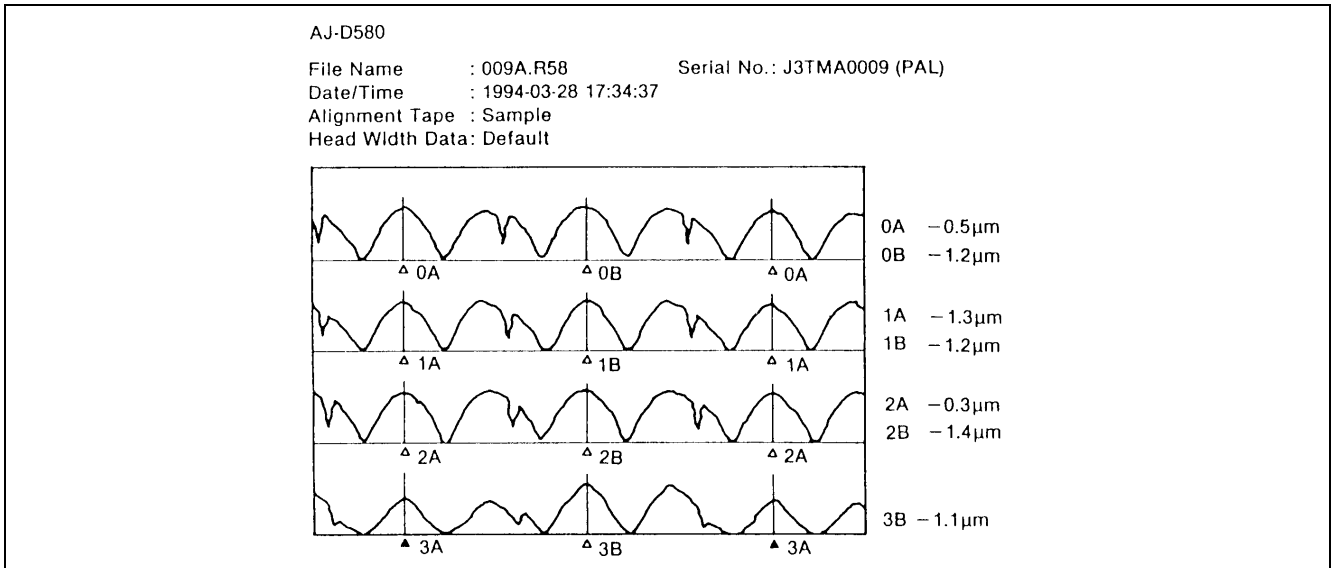
HEAD WIDTH DATA INPUT PROCEDURE

- ① After selecting HEAD WIDTH DATA, select (1) INPUT DATA. HEAD DATA are attached to the center drum as shown in the figure below.
- ② Enter HEAD DATA following the instructions that is displayed on the CRT.
- ③ After entering the HEAD DATA, hit <Y> key.

After confirming that data is entered correctly, hit <R> key and return to MAIN menu.



6. Set VTR to REMOTE mode
7. Hit <S> key (MEASUREMENT START) and insert Alignment tape.
8. After tape runs in 2X speed, data like it shown in the figure below is displayed on CRT. The specification is $\pm 1 \mu\text{m}$.
9. Adjust head height following the instructions that is displayed on CRT.
Since the 1A head is reference head, do not touch it.
 Adjustment is for three other heads, but not for the 1A head.

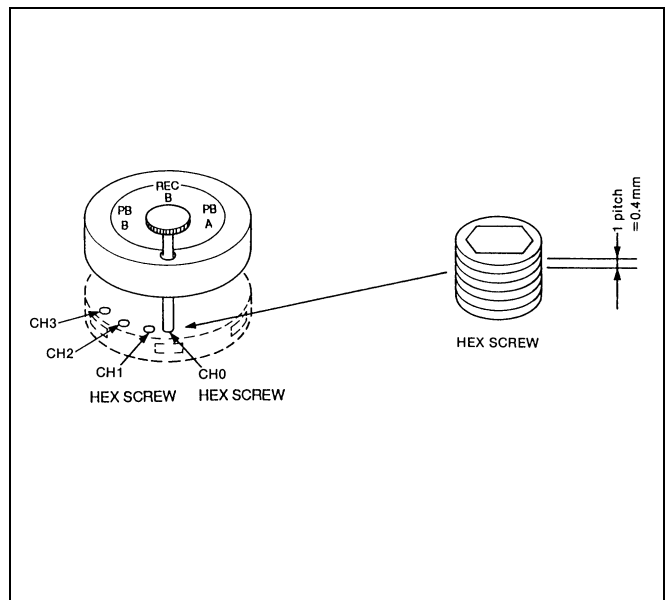


<B Adjustment>

1. Insert a hex wrench into the hole of upper drum as shown in the right figure, and gently turn the hex screw counterclockwise to remove the lock-tight coating.
2. Never turn the hex screw clockwise (tightening direction) if the lock-tight coating is still on it.
3. Since the hex screw was turned counterclockwise to remove lock-tight, gently turn the screw clockwise to back to its original position.
4. Turn the hex wrench in the direction shown on the CRT and adjust height so the indicated value is $0 \pm 1 \mu\text{m}$.
5. After adjustment is completed, apply lock-tight to the screws.
6. After adjustment is completed, apply lock-tight to the screws.

Note:

- 1) Turning the hex wrench 1° cause height to change approximately $1 \mu\text{m}$. Therefore be sure to turn the wrench slightly.
- 2) Never turn the wrench more than 20° , otherwise the tape comes off its track.
5. Adjust and confirm height three times. If the average value of three adjustments is within the specification, height adjustment can be



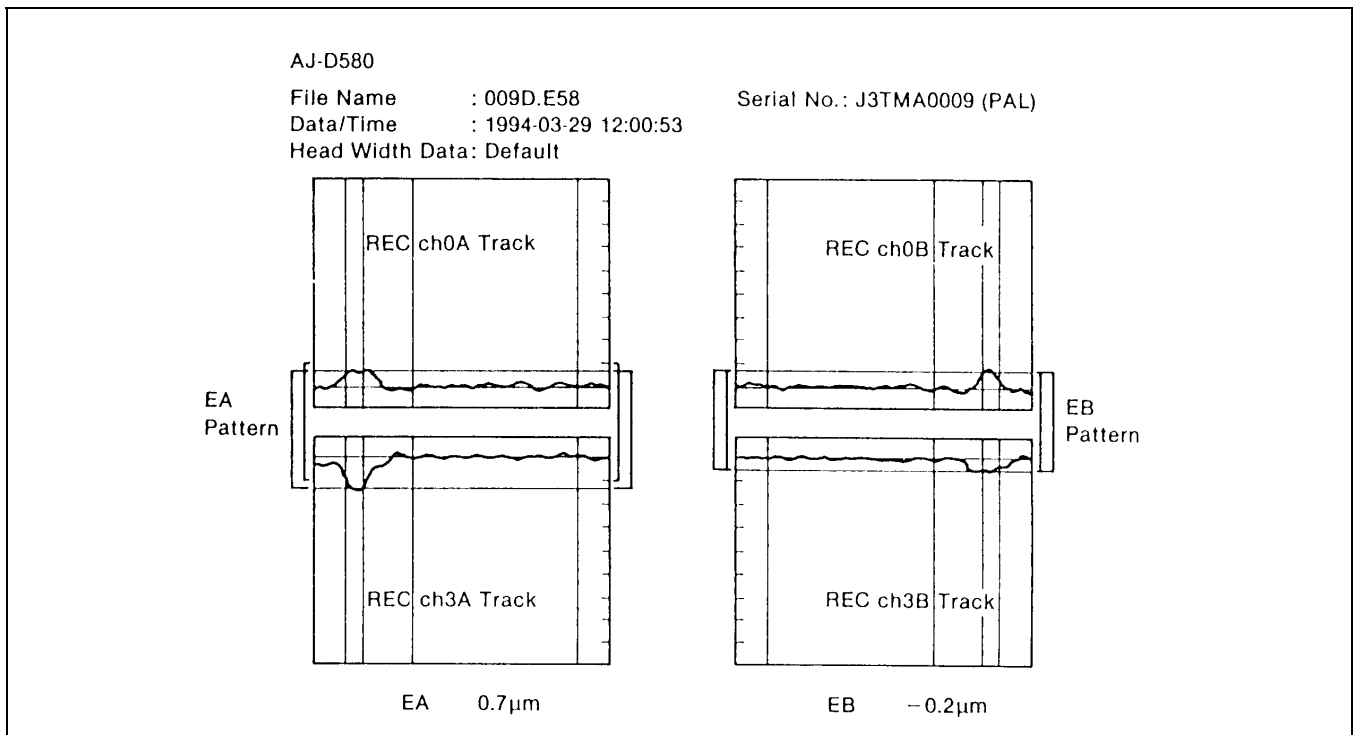
6-5-4. FE Head Height Adjustment

< Measurement >

1. Set VFK0832A switch to HEAD HEIGHT position.
2. Open SET UP I/F menu and set RS-232C to on and open MANUAL EDIT menu and set Tracking to Fix.
3. Select AJ-D580 FE HEAD menu in MAIN menu.
4. Select <H> HEAD WIDTH DATA in FE HEAD menu, and enter the number written on the center drum. If that number is not entered, the default data can be used. Please refer to Rec Head width data input procedure.
5. Hit <S> key (MEASUREMENT START) and insert self-recorded tape.
6. Tape runs as follows:
REC → REW → INSERT (CH1,CH3) → REW → PLAY
7. The measurement value is displayed on CRT as shown in figure below. The specification is $\pm 1 \mu\text{m}$.
8. After adjustment, confirm height three times. If the average value of three adjustments is within the specification, height adjustment can be completed.
9. After adjustment is completed, apply lock-tight to the screws.

```
FE HEAD HEIGHT [AJ-D580]
=====
QUATECH Ver. 7.0
D3/D5 TOOL

<S> MEASUREMENT START
<D> DATA SAVE / LOAD  [C:\]
<H> HEAD WIDTH DATA  [Default]
<M> MONITOR
<I> INSTRUCTION
<Q> QUIT
```



6-6. Final Confirmation of Tape transportation Linearity at the changing Modes

The following confirmation must be done in order to confirm that the tape is correctly positioned on the bottom drum tape lead.

<STEP 1>

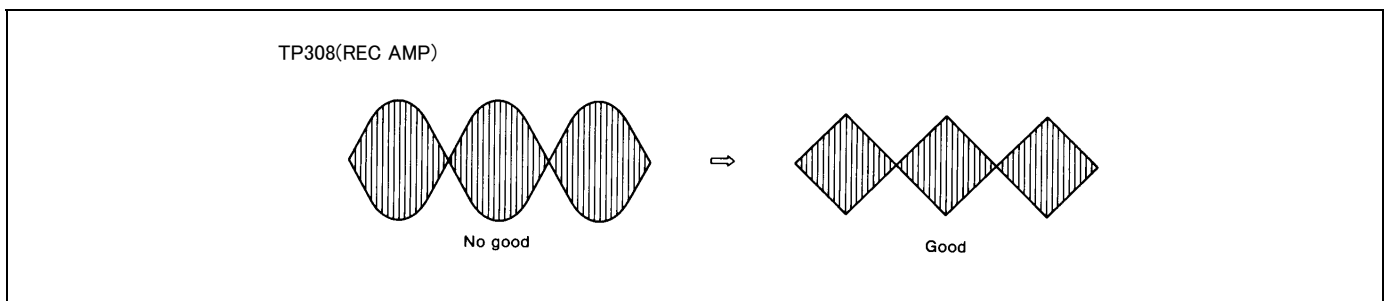
1. Oscilloscope CH1 : TP308 (CH0 ENV) (REC AMP)
CH2 : TP201 (H. SW) (REC AMP)
2. Play Alignment tape No.2 (0-16min).
3. Confirm that envelope is recovered to normal PB condition at the entrance side within 1 second when change the mode from REW to PLAY.
4. Confirm that envelope is recovered to normal PB condition at the entrance side within 1 second when change the mode from EJECT to PLAY.
5. Confirm that envelope is recovered to normal PB condition within 1 second when change the mode from STAND BY OFF to PLAY.
6. If out of the specification, readjust each post as follows.
 - a) Entrance side : P3, P4 and P5 Height adjustment
 - b) Exit side : P6, Post Height and A/C head tilt adjustment
 - c) Center portion : UPPER DRUM level adjustment

<STEP 2>

1. Connect linearity tool to the VTR.
2. Connect oscilloscope CH1 to TP203 on head amp of Linearity tool
3. Connect oscilloscope CH2 to TP201 (REC AMP) as trigger.
4. Touch upper edge of the tape between P5 post and the drum in play mode so that the linearity waveform has a 3~4 μ m drop at the entrance side on display.
5. Release the tape and confirm that the envelope (TP203) is recovered to normal PB condition within 1 second .
6. Touch upper edge of the tape between P6 post and the drum in play mode so that the linearity waveform has a 3~4 μ m drop at the exit side on display.
7. Confirm that the envelope (TP203) is recovered within 1 second on the oscilloscope.
8. Flip P3 post gently in play mode and confirm that envelope (TP203) is recovered to normal PB condition within 0.5 second.
9. If out of the specification, readjust each post as follows.
 - a) Entrance side : P3, P4 and P5 Height adjustment
 - b) Exit side : P6 Post Height and A/C head tilt adjustment

<STEP 3>

1. Play alignment tape No.1 color bar portion (0-10min).
2. Place the unit in the STILL mode.
3. Connect oscilloscope CH1 to TP308 (REC AMP) and CH2 to TP201 (REC AMP).
4. Confirm that envelope is diamond shape as shown below.

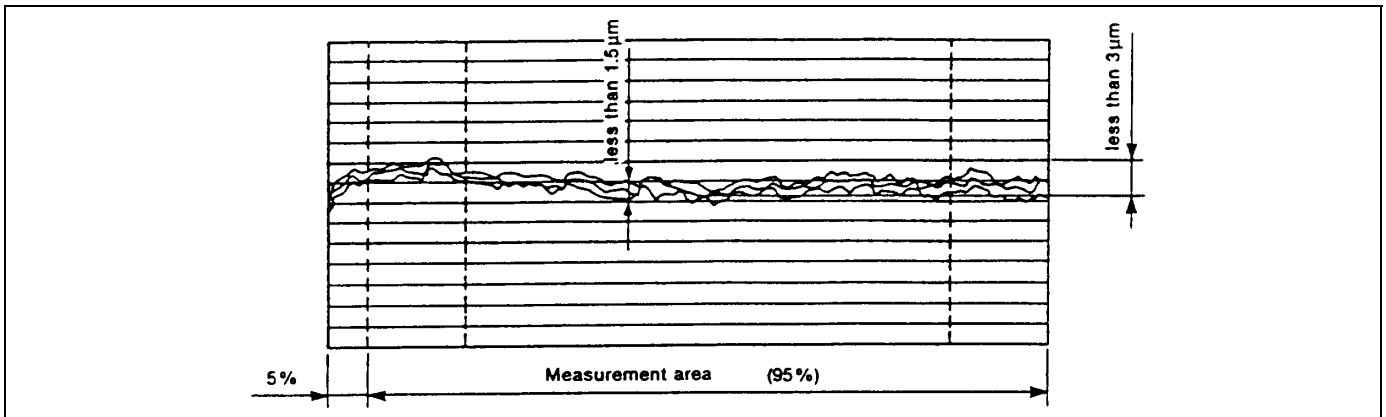


5. Place the unit in the VAR \times -1 mode. Make sure that bottom edge of the tape touches lower flange of the P7 post without tape curling. If tape curling occurs at bottom flange of P7 post, lower both P9 and P10 post slightly than the P8 post until tape curling disappears.

6-7. Final Confirmation of RF Envelope Linearity and Waving

Waving Confirmation

1. Set to Linearity measurement mode.
2. Play alignment tape No.3.
3. Set averaging time to 30 seconds and hit space button.
4. Confirm the waving (less than 1.5mm).



LINEARITY FINAL CONFIRMATION

1. With conditions as above, confirm that envelope waveform linearity is within 3 μm , as is shown in the figure.

Note:

If some noise occurs, the tape may cause it. In this case, at the better portion of the tape do the measurement.

Checking Shape of Linearity Waveform

If adjustment of posts and upper drum position can't make a waveform shape in horizontally straight, adjust the drum axis verticality according to the procedure outlined in the next section.

6-8. Drum Axis Verticality Adjustment

CAUTION:

This procedure is for only the case that linearity can't be in the specification by the adjustment of posts and upper drum position .

<Preparation>

1. Grate the tip (3mm ϕ) of Fine Adjustment Screwdriver (VFK0446) to make it 2mm.

<Installing the Drum Axis Verticality Adjustment Unit>

The unit can be mounted in two positions depending on the linearity waveform shape. Confirm the waveform shape and install the unit in the appropriate position. (Refer to the figure below and adjustment Procedure.)

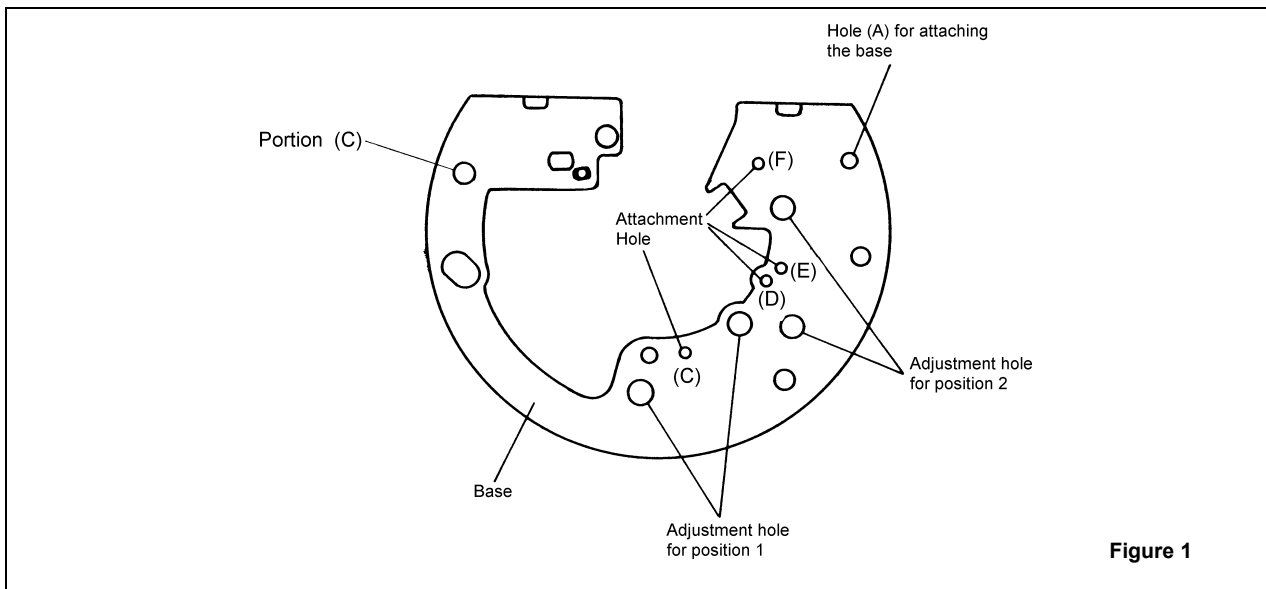
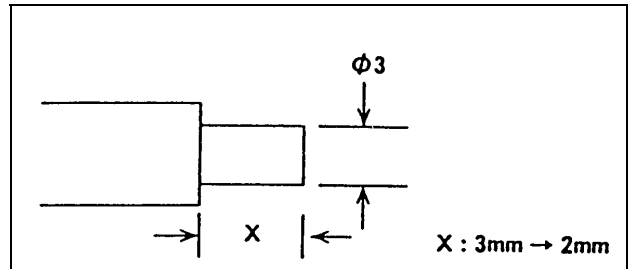


Figure 1

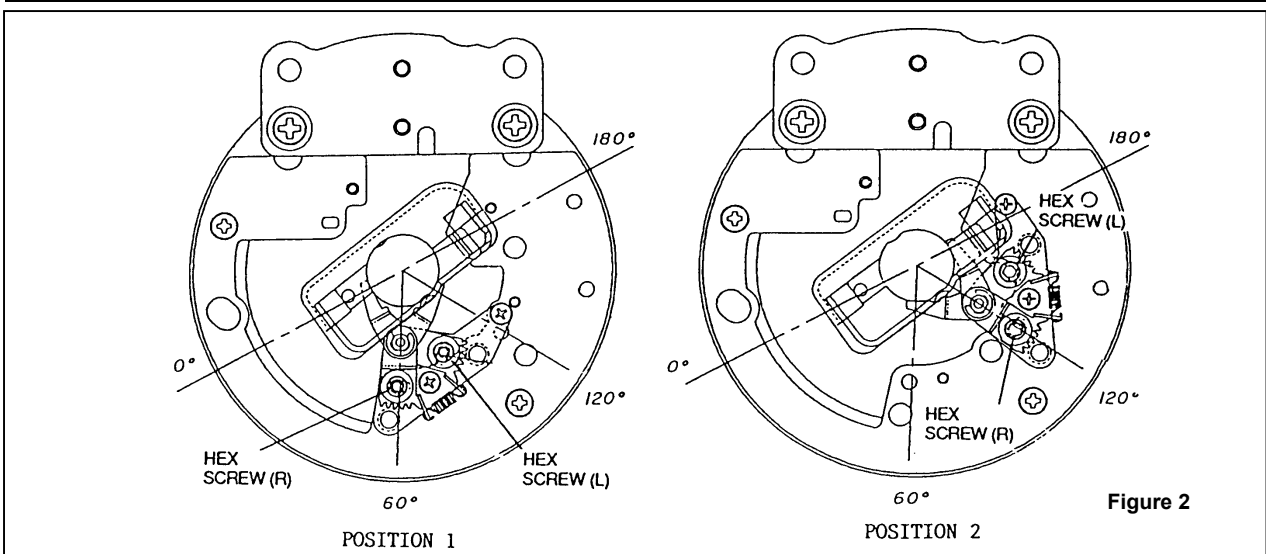


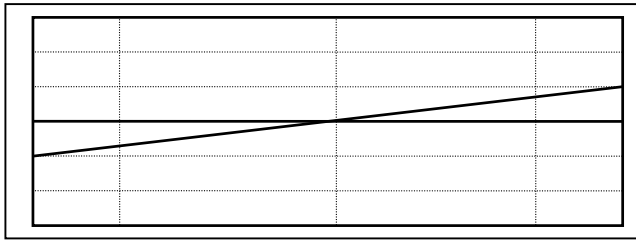
Figure 2

< Adjustment Procedure >

(1) CURVE (A):

Linearity goes up toward exit side.

PUSH the Axis toward 0 degrees direction as shown in figure 2.

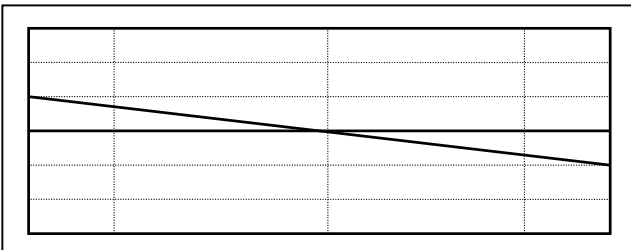


- 1) Remove hex screw (L).(refer to Figure 2)
- 2) Install Drum Axis Verticality U. to position 1 with attachment hole (C) and (D).
- 3) Loosen hex screw (R) and insert fine adjustment screwdriver to adjustment hole. And adjust linearity by rotating it counterclockwise.
- 4) After adjustment is completed, tighten hex screw (R) with torque 24.5cN.m (2.5kg.cm).

(2) CURVE (B):

Linearity goes down toward exit side.

PUSH the Axis toward 180 degrees direction as shown in figure 2.



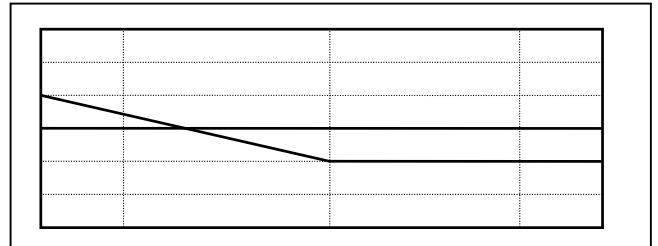
- 1) Remove hex screw (R)(refer to Figure 2).
- 2) Install Drum Axis Verticality U. to position 2 with attachment hole (E) and (F).
- 3) Loosen hex screw (L) and insert fine adjustment screwdriver to adjustment hole. And adjust linearity by rotating it clockwise.
- 4) After adjustment is completed, tighten hex screw (L) with torque 24.5cN.m (2.5kg.cm).

(3) CURVE (C):

Linearity goes down to center portion and then becomes flat toward exit side.

(Drum lead might be worn.)

PUSH the Axis toward 120 degrees direction as shown in figure 2.

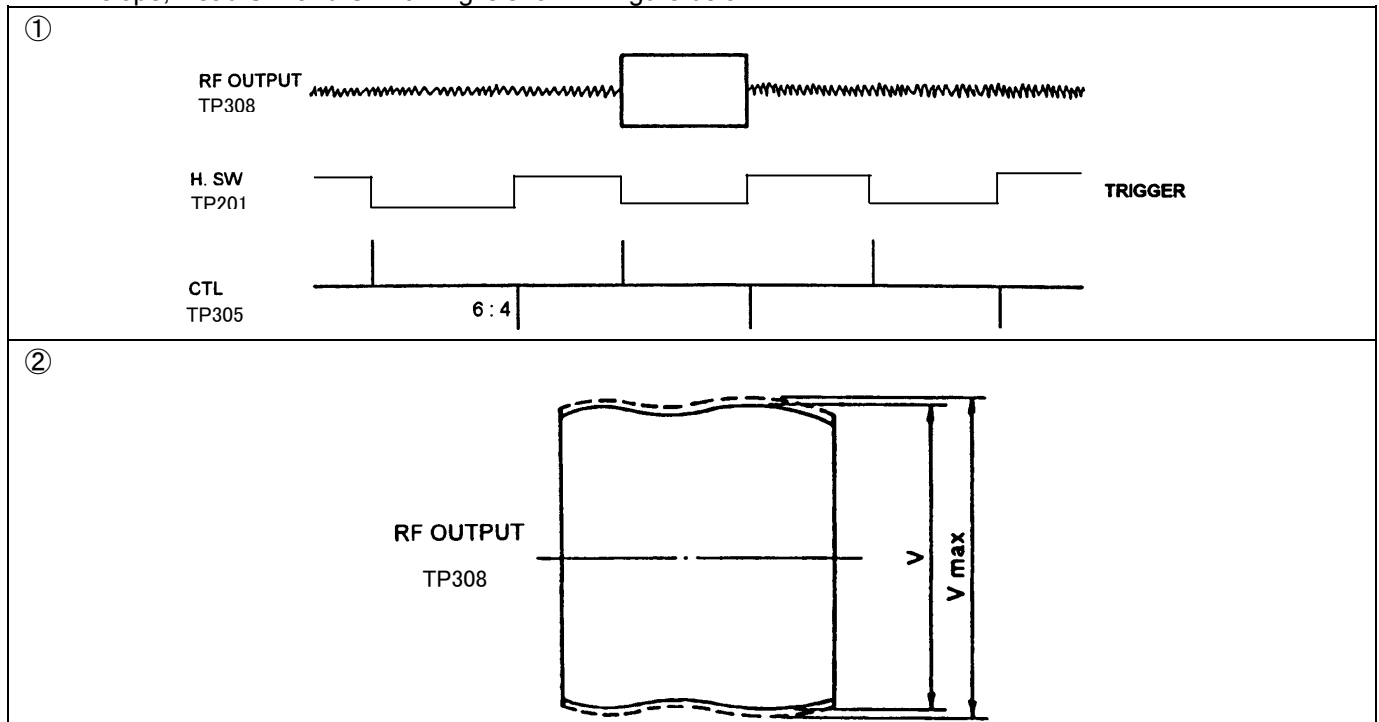


- 1) Remove hex screw (R)(refer to Figure 2).
- 2) Install Drum Axis Verticality U. to position 1 with attachment hole (C) and (D).
- 3) Loosen hex screw (L) and insert fine adjustment screwdriver to adjustment hole. And adjust linearity by rotating it clockwise.
- 4) After adjustment is completed, tighten hex screw (L) with torque 24.5cN.m (2.5kg.cm).

6-9. A/C HEAD HORIZONTAL POSITION ADJUSTMENT (X Value)

TP	TP308 (REC AMP), TP201 (REC AMP), TP305 (M1:SYS/SRV)
ADJ.	A/C Head Screw "F" and "N", Hole "O"
MODE	PLAY
TAPE	A/C Head horizontal position adjustment portion (16:00 - 23:00) of Alignment tape No. 2 (VFM6081EC)
	Linearity adjustment portion (23:00 - 30:00) of Alignment tape No. 2 (VFM6081EC)
TOOL	Eccentric driver (VFK0358)
SPEC.	① RF Envelope, Head SW and CTL timing is shown in figure below.
	② $V_2/V_{\max} \geq 0.05$ (Fig.B)

RF Envelope, Head SW and CTL timing is shown in figure below.

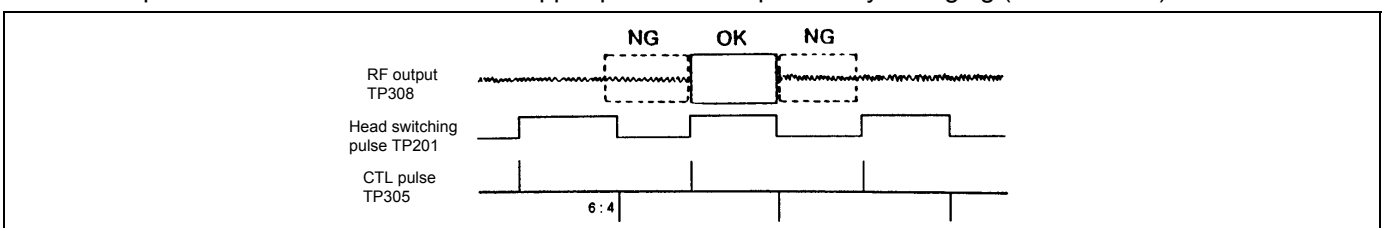


[Check Items]

- ① As the final confirmation that A/C head is securely fixed, ensure that:
- The locking screw used to adjust A/C head height is tightened to the stipulated torque.
Stipulated torque: $78.5 \pm 9.8 \text{ cN} \cdot \text{m} (8 \pm 1 \text{ kgcm})$
 - The locking screw used to adjust A/C head X value is tightened to the stipulated torque.
Stipulated torque: $39.2 \pm 9.8 \text{ cN} \cdot \text{m} (4 \pm 1 \text{ kgcm})$
 - The locking screw (in spring) used to adjust A/C head tilt and azimuth is not loosen.
 - Lock-tight has been applied to all screws.
 - The X value does not change after pressing A/C head by $29.4 \text{ cN} \cdot \text{m} (3 \text{ kg} \cdot \text{cm})$.

[Hints]

- ① Since there are several points where envelope size is maximum, adjust the envelope so that maximum envelope must be obtained at the next upper pulse of CTL pulse duty changing ($6:4 \longleftrightarrow 4:6$).



6-10. A/C HEAD HORIZONTAL POSITION Confirmation (X Value)

ADJ.	Optimize indication on the tracking meter.
MODE	PLAY TRACKING : OPTIMIZE mode
TAPE	A/C head horizontal position adjustment portion (16:00 - 23:00) of D3 Alignment tape No. 2 (VFM6081EC)
SPEC.	$0 \pm 2\text{mm}$, 0 ± 23 (OPTIMIZE Value)

< MENU CONDITION >

- Press following keys in order.
- ①. VIDEO IN → F1 (ING SG) → INSERT → F9 (INSERT ON)
- ②. TEST → F7 (SERVO) → F10 (TRACKING) FIX → OPT AUTO

<STEP 1>

- Insert alignment tape and press the PLAY button on Front Panel. (The value is indicated at A portion.)
- Confirm that the value is within the specification (0 ± 23)
- Repeat item 1 and 2 three times.
- If it is not, readjust X Value.

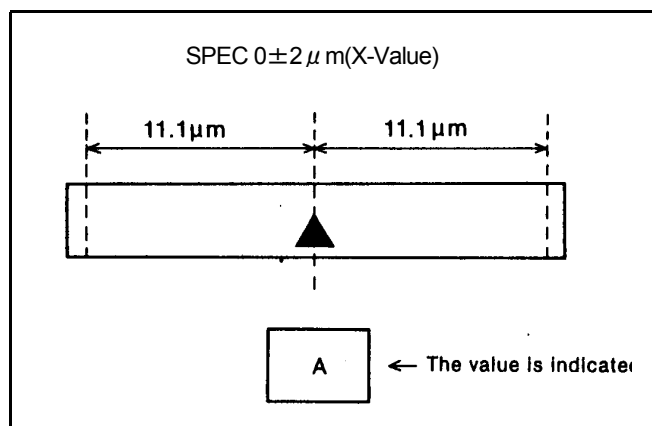


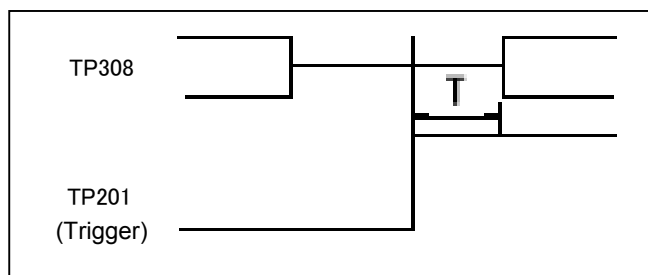
Figure OPTIMIZE Indication

6-11. PG Shifter Adjustment

TP	TP308(REC AMP) TP201(REC AMP)
ADJ.	PG SIFT adjustment Value (TEST SERVO MENU)
MODE	PLAY
TAPE	D3Alignment tape No.2 (VFM6081EC) (0:00 - 16:00)
M.EQ.	Oscilloscope
SPEC.	(525) $35.41\text{ms} \pm 0.5\text{ms}$

X value adjustment should be always completed before this adjustment.

- Open TEST SERVO menu.
- Set "FIX" in F10 (TRACKING) mode.
- Simultaneously press F6 (PG SHIFT) and F13 (ADJ ENABLE) keys.
- With the ADJUST knob, adjust PG SHIFT value so that interval T in the figure below is within the specification.



7. Major Mechanism Parts Replacement and Adjustment Procedures

7-1. General

When mechanical parts are replaced, pay attention to the following notes:

- 1) Always turn power off before replacing any parts.
- 2) Refer to the Special Tools and Fixtures Table and select correct tools.
- 3) After replacement is completed, be sure to clean parts in accordance with the procedure described in "Cleaning Procedure."

7-2. Drum Unit Replacement

7-2-1. Replacement Procedure

(Removal)

1. Remove top panel.
2. Disconnect connectors P303 (Green) and P305 (Red) on REC AMP P.C. Board.
3. Disconnect connectors P201 (Green), P401 (Red), P601 (Green) and P801 (Red) on S1 P.C. board.
4. Disconnect connector P1 on SERVO CTL P. C. BOARD.
5. Remove Head cleaning unit as follows.
 - ① Remove two screws that are not glued.
 - ② One of screws is under of the spring, so pull the spring knob and makes space to insert a screwdriver. (Refer to Fig. 7-2-1)

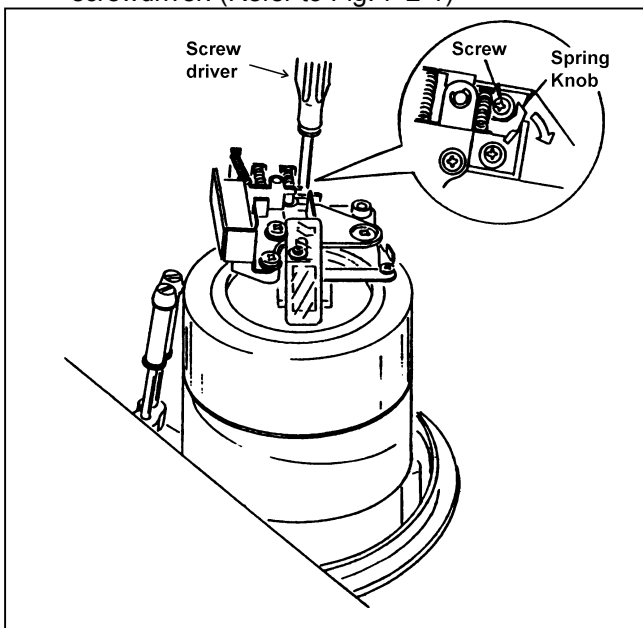


Figure 7-2-1

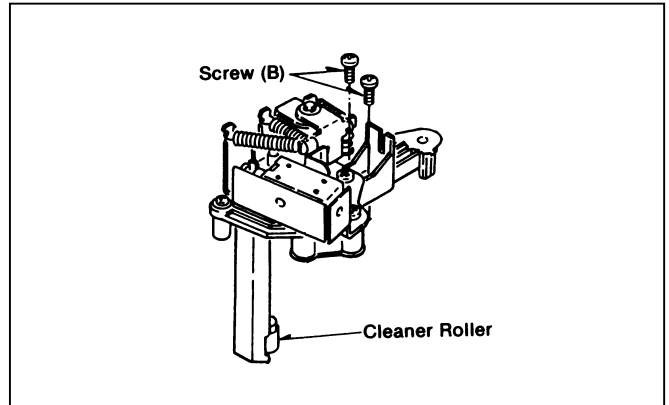


Figure 7-2-2 Cleaner roller unit removal

6. Remove bottom panel.
7. Remove L1, L2, M1 P.C. Board and shield plate.
8. Referring to figure 7-2-3, remove 2 connectors on drum unit and 3 connectors on p.c. board.
9. Unscrew 3 screws (B) and remove Drum Unit as shown in Figure 7-2-3.

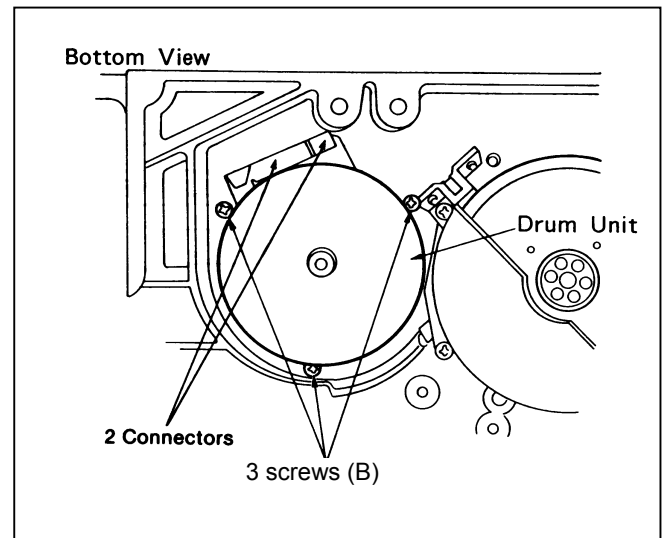


Figure 7-2-3 Drum unit Removal

(Installation)

1. Install NEW DRUM Unit in reverse order of previous steps.

(Adjustment after Drum Unit Replacement)

The adjustment required after replacing drum unit is basically the same as that performed after replacing center drum. For adjustment procedure, refer to Sec. 6, "Center Drum Replacement and Adjustment."

7-3. S-Reel Base Unit / T-Reel Base Unit Replacement and Adjustment

7-3-1. Replacement Procedure

(Removal)

1. Remove top panel.
2. Remove front loading unit.
3. Remove side panel and bottom panel.
4. Remove L1, L2, M1 P.C. Board and shield plate.
5. Unscrew 4 screws (A) and disconnect 4 Connectors (B), then remove 4 Cables as shown in Figure 7-3-1.
6. Unscrew 3 screws (B) and remove Photo P.C.B. Angle as shown in Figure 7-3-2.
7. Turn Worm Motor Belt so that Rail Holders (A) and (B) are appear as shown in Figure 7-3-2 and 7-3-3.
8. Unscrew 8 screws (C) and remove Rail Holders (A) and (B) as shown in Figure 7-3-2 and 7-3-3.
9. Remove S-Reel Base and T-Reel Base from the Rail A and B.
10. Remove supply brake unit and take-up brake unit and the supply brake solenoid and take-up brake solenoid according to the procedure described in Sec. 7-4, "Supply Brake Unit and Take-up Brake Unit Replacement," and Sec. 7-5, "Supply Brake Solenoid and Take-up Brake Solenoid Replacement."

Figure 7-3-1 Removal of the Cables

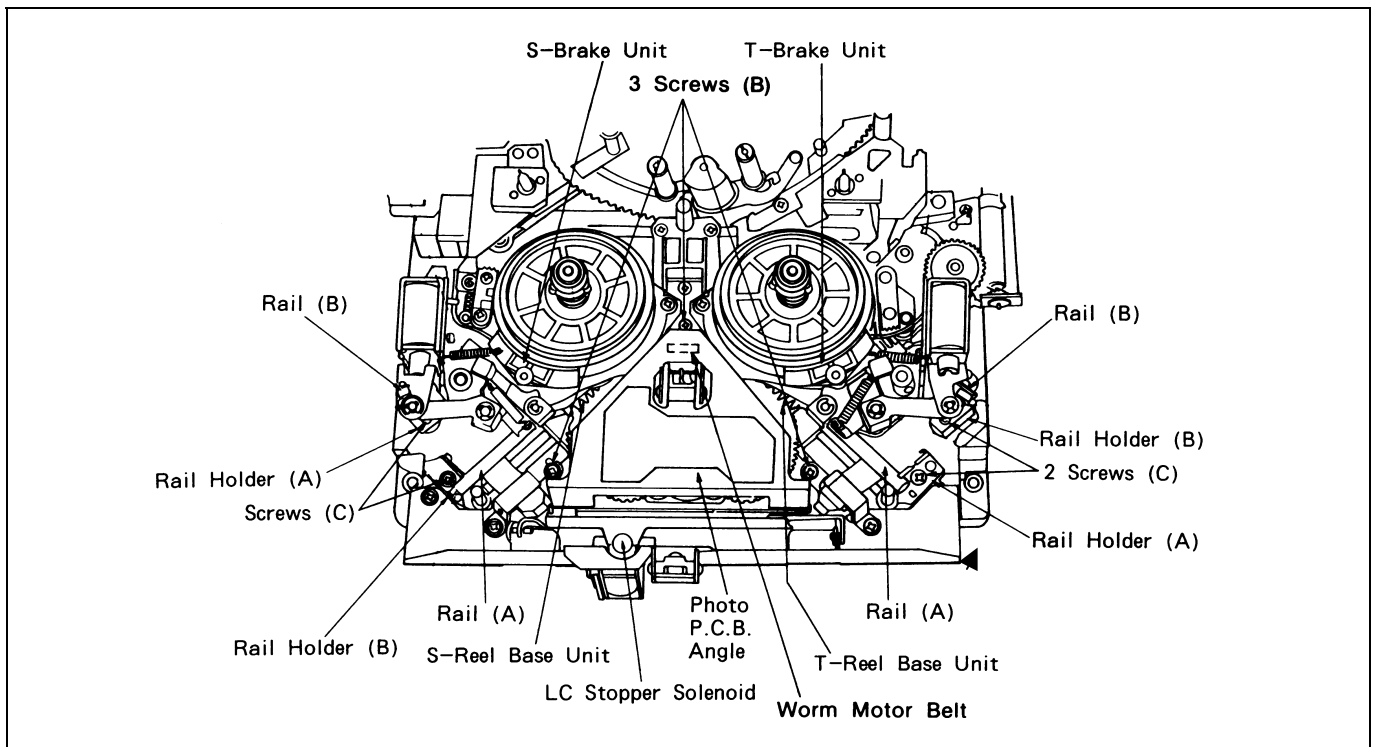
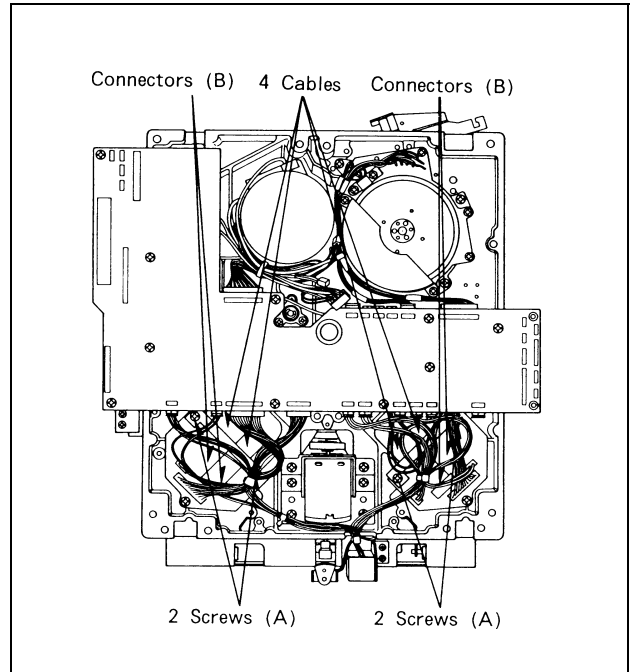


Figure 7-3-2 Removal of the S-Reel Base Unit and T-Reel Base Unit (Small Cassette Position)

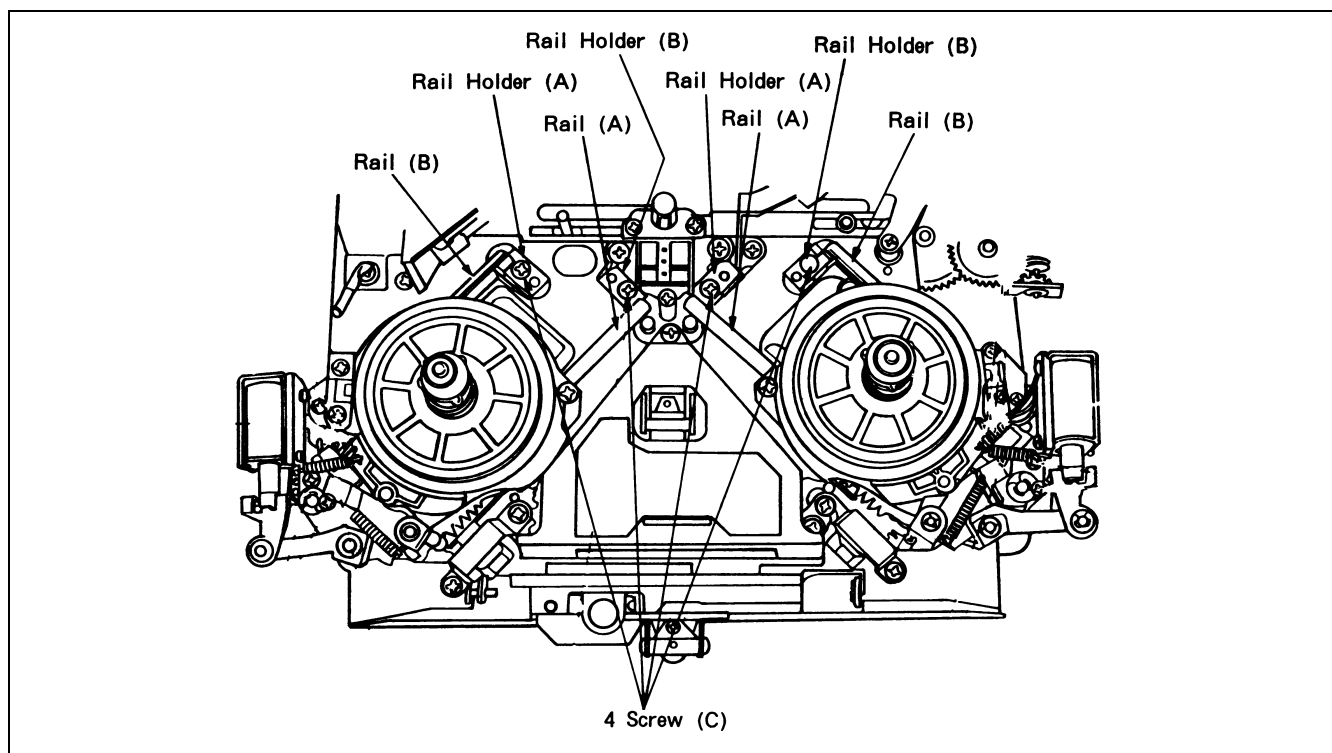


Figure 7-3-3 Removal of the S-Reel Base Unit and T-Reel Base Unit (Large Cassette Position)

7-3-2. Adjustment Procedure

1. Remove reel base drive gear set.

CAUTION:

Remove reel base drive gears carefully, since spring is incorporated in each unit.

2. Make sure both reel bases turn smoothly and then set both reel bases in small cassette position.
3. Install the reel base drive gears so that marks on the drive gears line up with those on reel base units. (Refer to figure 7-3-4.)
4. After drive gears are installed, confirm that reel bases are pulled in the direction of arrows as shown in figure 7-3-4.
5. Install photo board angle.
6. Turn worm belt and confirm that the timing of S-Reel Base and T-Reel Base movement is practically the same.

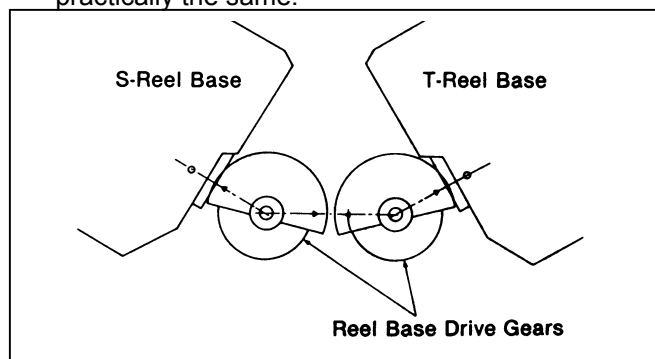


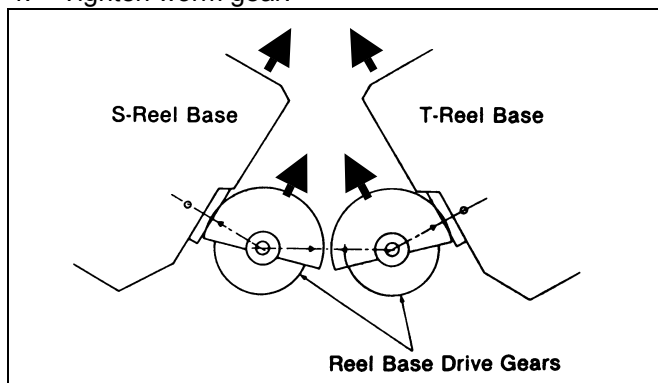
Figure 7-3-4.

(Installation)

1. Install supply brake unit and take-up brake unit and the supply brake solenoid and take-up brake solenoid, by reversing the procedure described in Sec. 7-4, "Supply Brake Unit and Take-up Brake Unit Replacement," and Sec. 7-5, "Supply Brake Solenoid and Take-up Brake Solenoid Replacement."
2. Install S-Reel Base and T-Reel Base, performing the above adjustment in the reverse order of previous steps.

7-3-3. Cassette Supporter Height Adjustment

1. Remove front loading unit.
2. Set mechanical neutral unit correctly over reel bases.
3. Loosen cassette supporter worm gear so that cassette supporter contacts mechanical neutral unit.
4. Tighten worm gear.



7-4. Supply Brake Unit and Take Up Brake Unit Replacement

(Removal)

1. Remove top panel.
2. Remove front loading unit.

3. Remove 4 E-Rings, 6 Washers and 2 Brake Spring (2) as shown in figure 7-4-1.
4. Remove 2 Brake Interlock Angle and pull out S-Brake Unit and T-Brake Unit as shown in Figure 7-4-1.

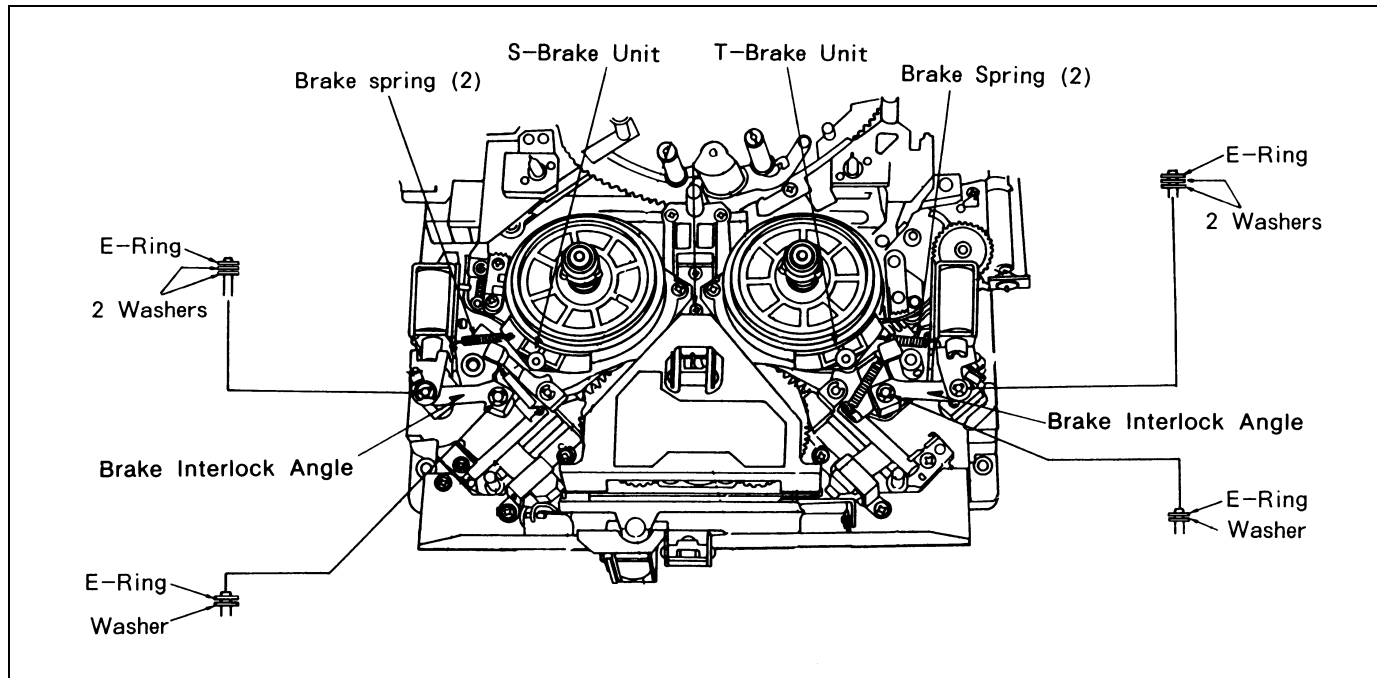


Figure 7-4-1 Removal of S-Brake Unit or T-Brake Unit

(Installation)

1. Install S-Brake Unit and T-Brake Unit following the previous steps in reverse order.
2. After installation, position adjustment should be preformed as follows.

(Adjustment)

1. When moving spring pin in each brake solenoid plunger in direction (C) and (D) as shown in figure 7-4-2 and 7-4-3, observe the clearance (E) between each brake pad and its turntable. This clearance should be between 1mm.

2. If not, loosen 2 screws (A) of supply side and (D) of take up side and adjust brake solenoid so that the clearance (E) is within the specification. And tighten 2 screws (A) and (D).
3. Observe the clearance (F) as shown in figure 7-4-3 and make sure that it is within 0.09mm to 0.13mm.
4. If not, loosen 2 screws (B) and clearance (F) is within the specification. And tighten 2 screws (B).

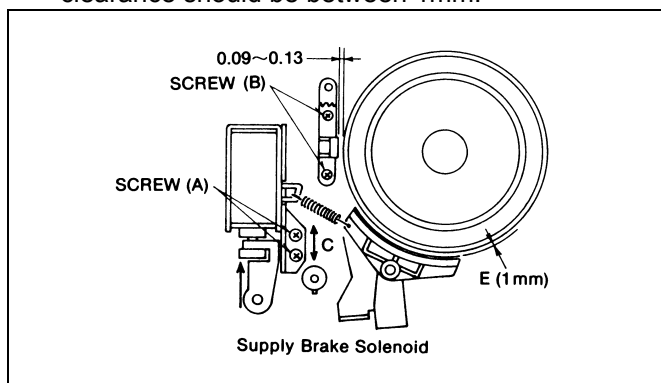


Figure 7-4-2

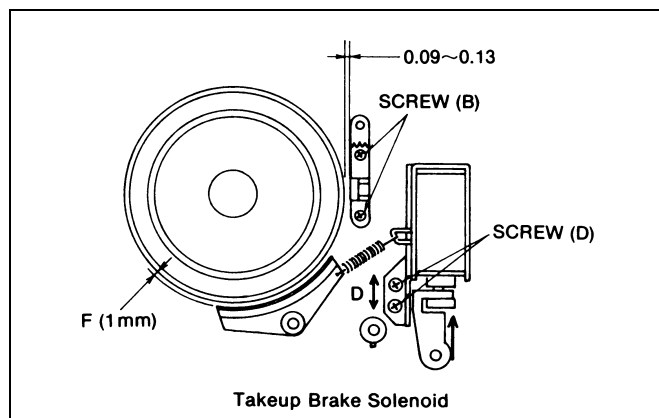


Figure 7-4-3

7-5. Supply Brake Solenoid and Take Up Brake Solenoid Replacement

(Removal)

1. Remove top panel.
2. Remove front loading unit.

3. Remove 6 soldering portions, 2 Brake Spring (2) and 4 screws (A), then pull out S-Brake Solenoid and T-Brake Solenoid as shown in Figure 7-5-1.

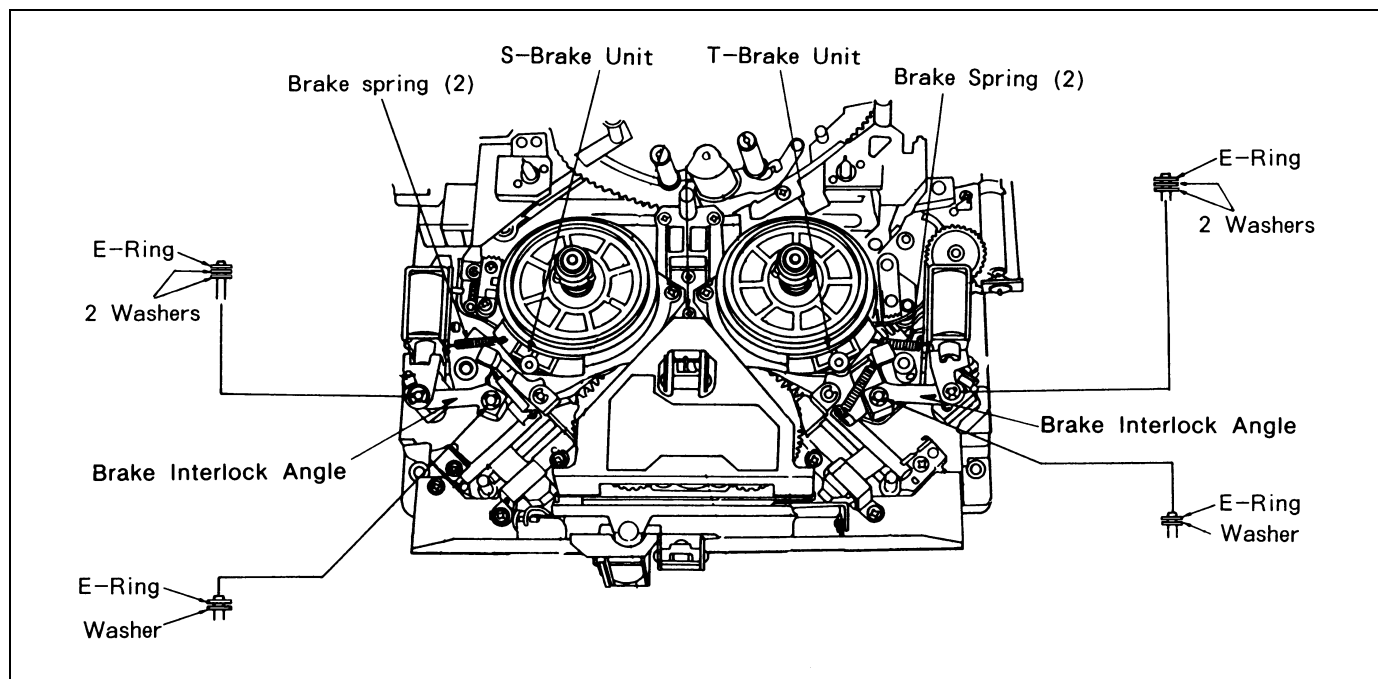


Figure 7-5-1 Removal of the S-Brake Solenoid and the T-Brake Solenoid

(Installation)

1. Install S-Brake Solenoid and T-Brake Solenoid following the previous steps in reverse order.
2. After installation, position adjustment should be performed as follows.

(Adjustment)

1. When moving the spring pin in each brake solenoid plunger in direction (C) and (D) as shown figure 7-5-2 and 7-5-3, observe the clearance (E) between each brake pad and its turntable. This clearance should be between 1mm

2. If not, loosen 2 screws (A) of supply side and (D) of take up side and adjust brake solenoid so that the clearance (E) is within the specification. And tighten 2 screws (A) and (D).
3. Observe the clearance (F) as shown in figure 7-5-3 and make sure that it is within 0.09mm to 0.13mm.
4. If not, loosen 2 screws (B) and clearance (F) is within the specification. And tighten 2 screws (B).

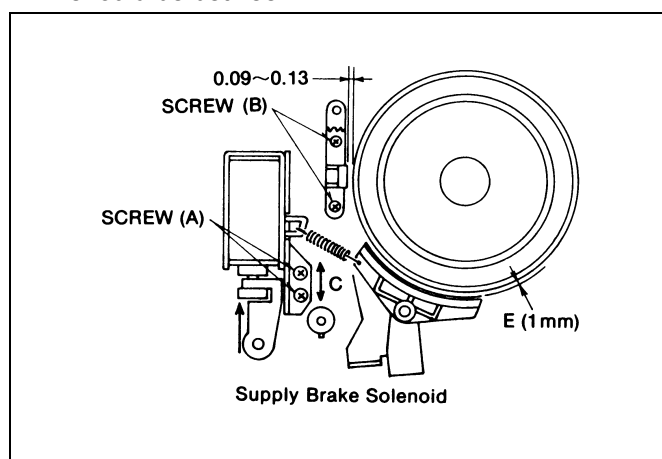


Figure 7-5-2

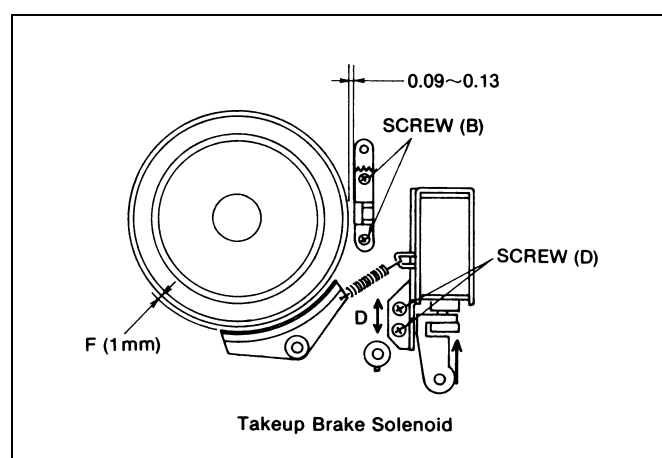


Figure 7-5-3

7-6. Pinch Arm Unit Replacement

(Removal)

1. Turn Sub Loading Motor so that Loading Arm Unit is in loading complete position and keep pushing Ring Drive Gear, then turn loading Ring to the position as shown in Figure 7-6-1.

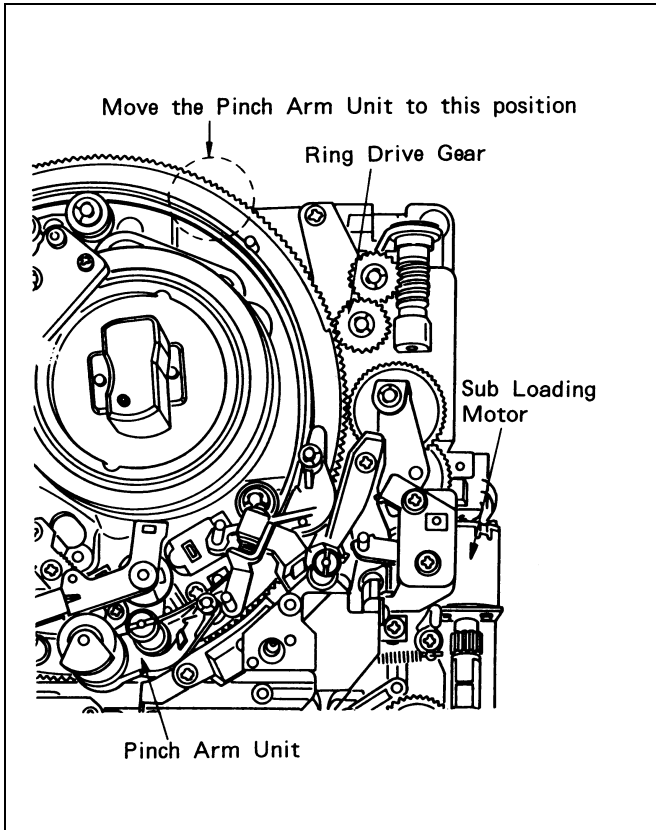


Figure 7-6-1 Replacement of Pinch Arm Unit

2. Remove E-Ring and Washer and pull out Pinch Arm Unit as shown in Figure 7-6-2.

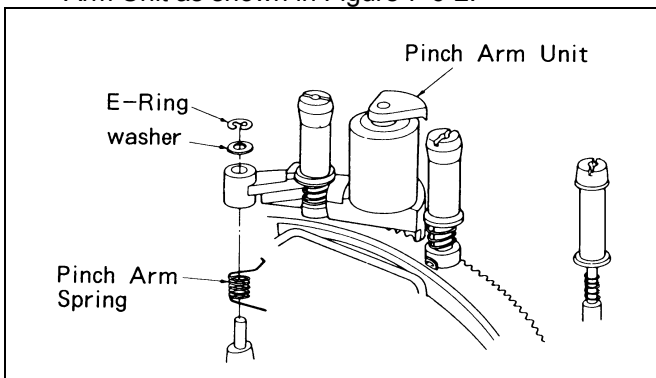


Figure 7-6-2 Replacement of Pinch Arm Unit

(Installation)

1. Install Pinch Arm Unit following the previous steps in reverse order.

7-7. A/C Head Replacement

7-7-1. Replacement Procedure

* Tools required

Nut Driver (7m/m)(VFK0676)

Hex. Wrench (VFK0326)

(Removal)

1. Remove nut (A) and washer, loosen hex-screw (B), hang off height adjustment spring and then remove A/C Head assembly as shown in Figure 7-7-1.

Note: Before removing nut (A), note its height so that it can be reinstalled in the same position.

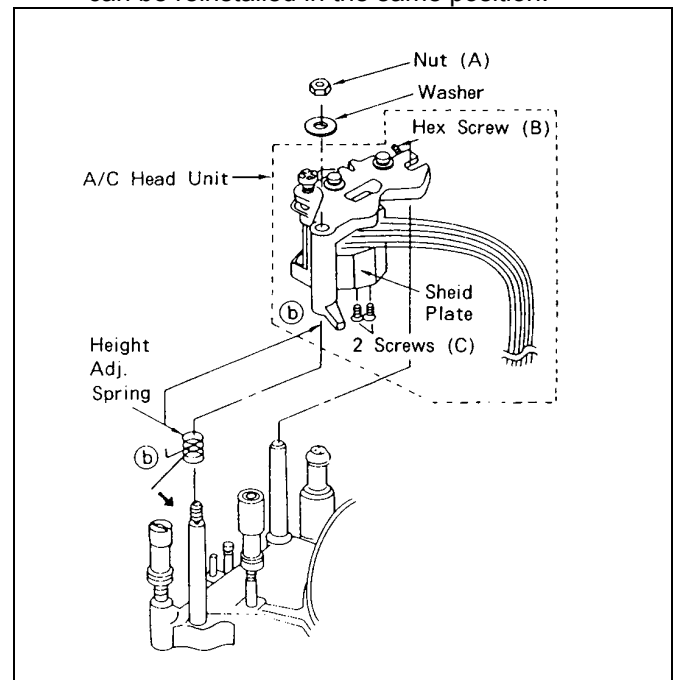


Figure 7-7-1 A/C Head Removal

2. Remove shield plate by removing 2 screws (C) as shown in Figure 7-7-1.
3. Disconnect 3 connectors P403 (White), P407 (Green) and P408 (Black) that is on REC AMP P.C.Board.
4. Disconnect 2 connectors P6 and P7 that is on SERVO CTL P.C. Board.
5. Unsolder lead wires on A/C Head. (When unsolder lead wires, do not unsolder all at the same time)

(Installation)

- 1. Confirm that the clearance between head and head mounting plate is parallel and approximately 1mm as shown in figure 7-7-3. If not, adjust screws (D) and (E) and hex screw (A), which are shown in figure 7-7-3, so that the clearance is parallel and approximately 1mm.

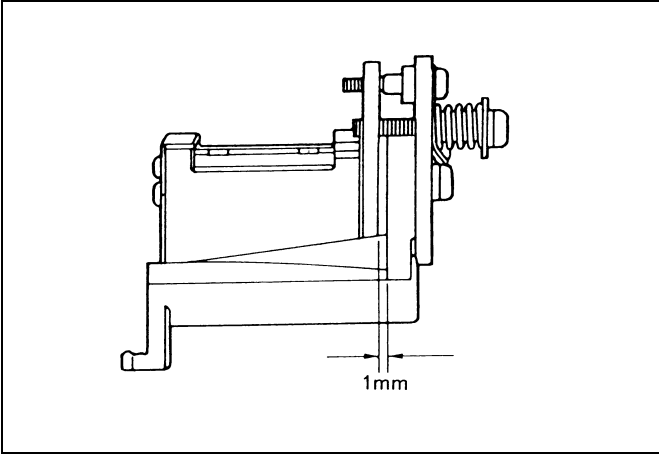


Figure 7-7-2 A/C Head pre-adjustment

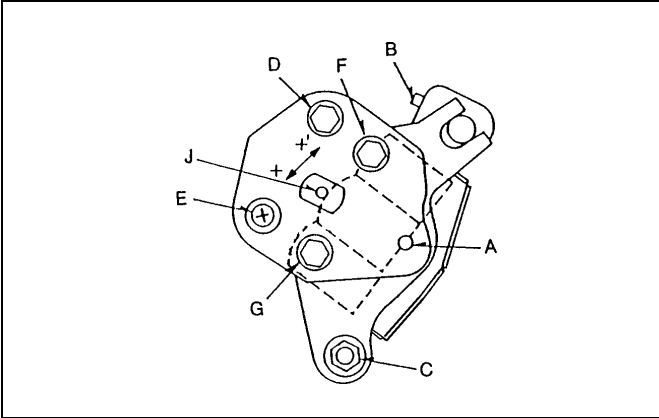


Figure 7-7-3 Screws of the A/C Head

A/C Head Side	Cable Color		Connector No.
1	RED	YELLOW	P403 (REC AMP)
2	WHITE	RED	
3	RED		
4	WHITE	ORANGE	
5	RED		
6	WHITE	BROWN	
7	RED		
8	WHITE		
9	RED	BLACK	P6 (SERVO CNTL)
10	WHITE	TRANS PARENT	P407 (REC AMP)
11	RED		BLUE
12	WHITE	GREEN	
13	RED		
14	WHITE		
15	RED	GREEN	P408 (REC AMP)
16	WHITE		

- 2. Solder lead wires of new A/C head.
(Refer to figure 7-7-4)
- 3. Install shield plate onto A/C head assembly.
- 4. Install new A/C head onto mechanical chassis.
- 5. Hang on height adjustment spring and, tighten nut (A) as shown in Figure 7-7-5.
- 6. Clean surface of the A/C head.

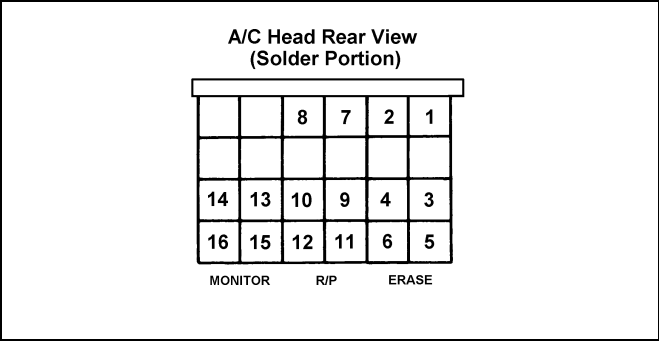


Figure 7-7-4 Connectors on A/C Head

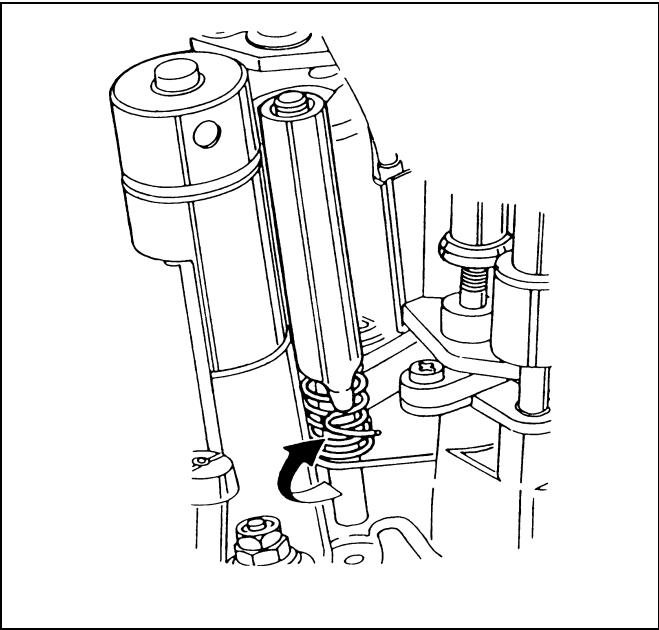


Figure 7-7-5 Installation of the spring

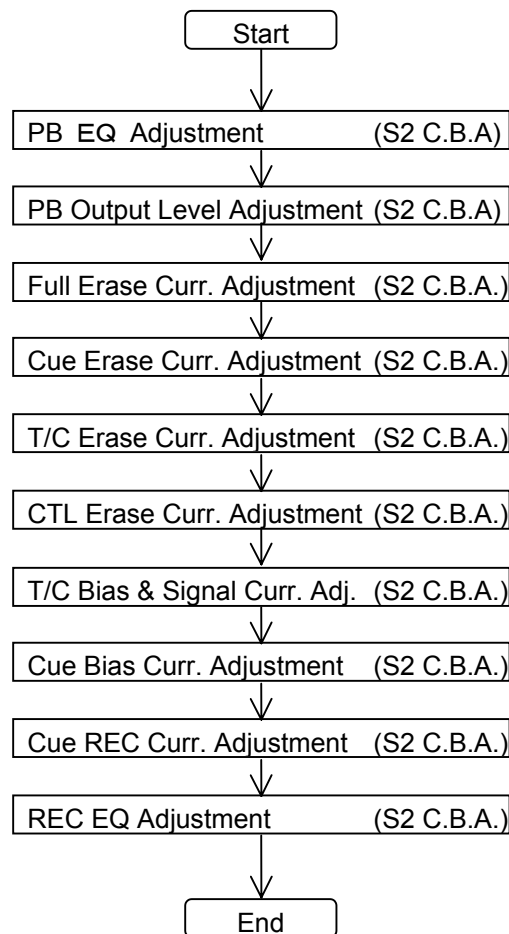
7-7-2. A/C Head Adjustment

1. After A/C head is replaced, execute the steps described in "A/C Head Tilt Adjustment" and "CTL Output Level Confirmation" (which is part of the "X Value Adjustment" procedure).

CAUTION: Do not tighten hex screw (B), which is located on the side of A/C head, until A/C head height adjustment is completed.

2. After A/C head mechanical adjustment is completed, perform electrical adjustments according to the flowchart shown below. For details regarding adjustment procedure, refer to electrical adjustment procedures described in Section 5.

Flowchart of Electrical Adjustments Following A/C Head Replacement



7-8. Full Erase Head Replacement and Adjustment

(Removal)

1. Remove top panel.
2. Unsolder 2 leads wire on full erase head as shown in figure 7-8-1.
3. Remove 2 screws (A) and remove S Base (1) Unit as shown in figure 7-8-1.
4. Remove screw (B) as shown in figure 7-8-2. And remove head.

(Installation)

1. Follow the previous steps in reverse order.
2. After installing head, perform the following electrical adjustments.
3. Confirm and adjust according to Full Erase Curr. Adjustment procedure.

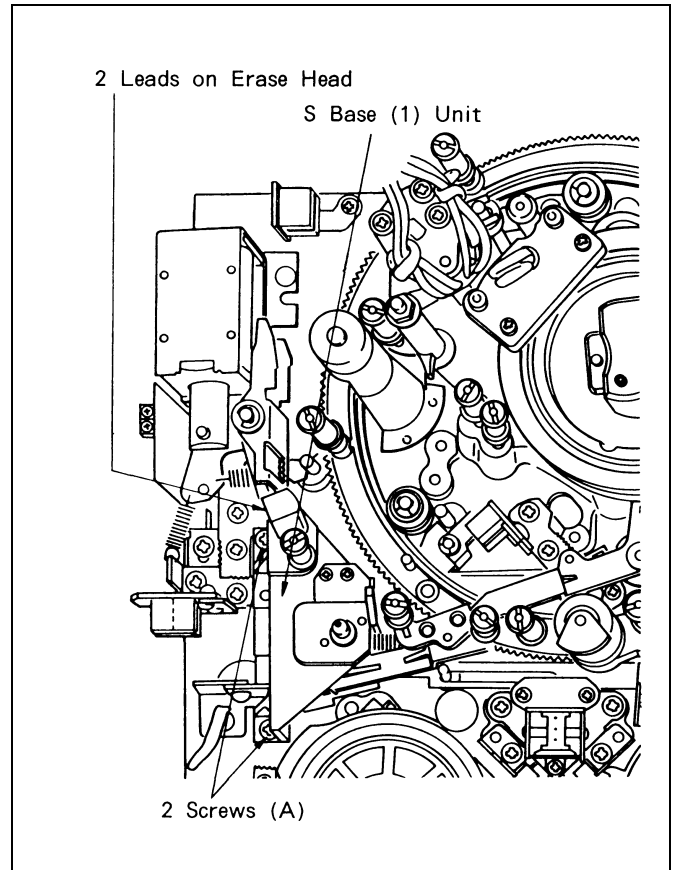


Figure 7-8-1

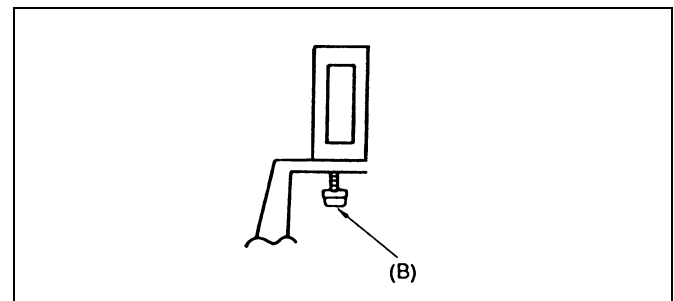


Figure 7-8-2 Full Erase Head Removal

7-9. Post Roller Unit Replacement

Note:

When you replace Post roller unit, install one at a time, and optimize its height position.
(Before replacing any more)

(Removal)

1. Remove top panel.
2. Remove front loading unit (only when replacing post P1, P2, P3, P8, P9, or P12).
3. Using only the outer sleeve of post driver (VFK0293), remove top flange by turning P2 and P3 post counterclockwise. Do not touch hex screw on top flange, which is shown in figure 7-9-1.
4. To remove other posts, use post driver outer sleeve (VFK0910) and turn each post counterclockwise to remove top flange.
5. Remove post roller unit (B) as shown in figure 7-9-2. Be sure not to loosen post spring (D)

(Installation)

1. Install new post roller unit.
2. Install previously removed top flange.

Note:

Never turn hex screw on top flange. If top flange is installed with hex screw in another position, the post height changes, which may cause tape curl.

3. Observe tape transportation and confirm that tape does not curl at any of post flanges.
4. Since P3, P5, and P6 posts affect the envelope linearity, observe envelope output and confirm that linearity remains unchanged.
5. If envelope linearity is out of the specification, adjust height of P3, P5, and P6 post. For the adjustment procedure, refer to "P3 Post Height Adjustment" and "P6 Post Height Adjustment."

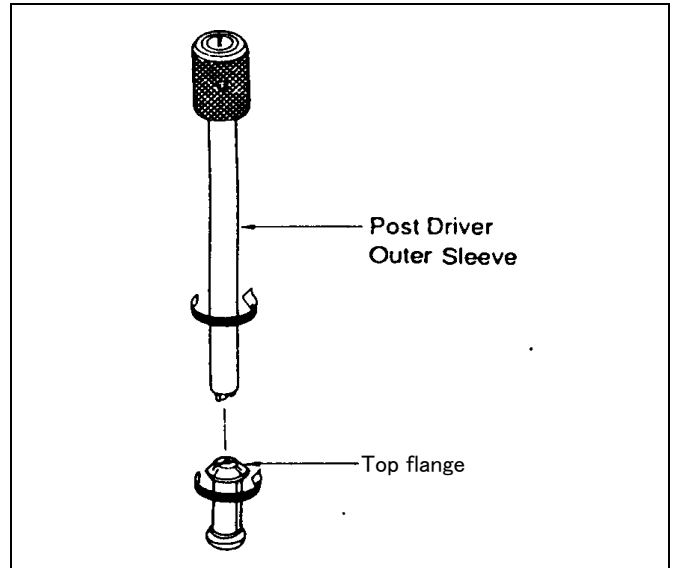


Figure 7-9-1 Flange Removal

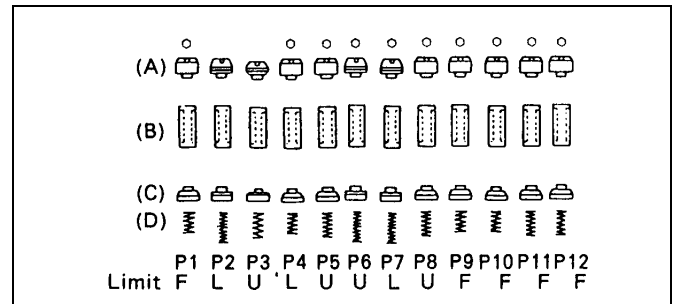


Figure 7-9-2 Each Post Rollers

7-10. Capstan Rotor Unit and Capstan Bearing Replacement & Adjustment

(Removal)

1. Remove side panel and bottom panel.
2. Remove L1, L2, M1 P.C.Board, and shield plate.
3. Remove 2 screws (A) and remove Capstan Motor Cover as shown in figure 7-10-1.

Note:

Use a non-magnetic screwdriver.

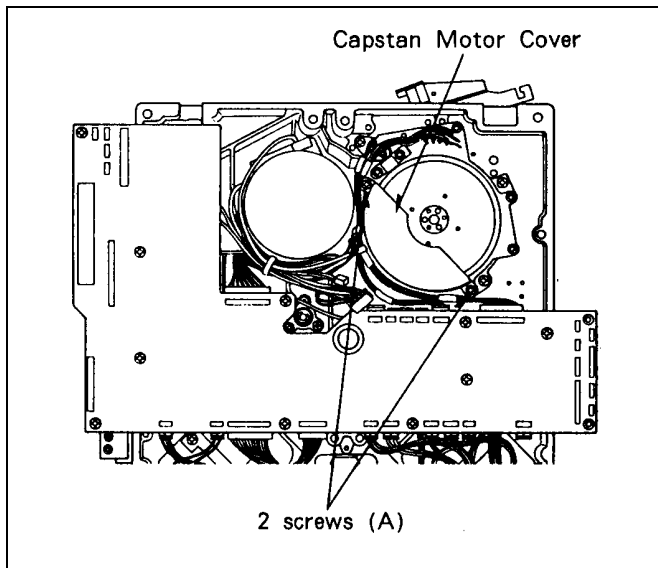


Figure 7-10-1 Capstan Motor Cover Removal

4. Remove top panel. Then Loosen Hex, Screws (B) and remove upper side Capstan Bearing after removing Pressure Boss, Wave Washer, Pressure Holder as shown in Figure 7-10-2.
5. Pull out Capstan Roller Unit and remove lower side Capstan Bearing shown in Figure 7-10-2.

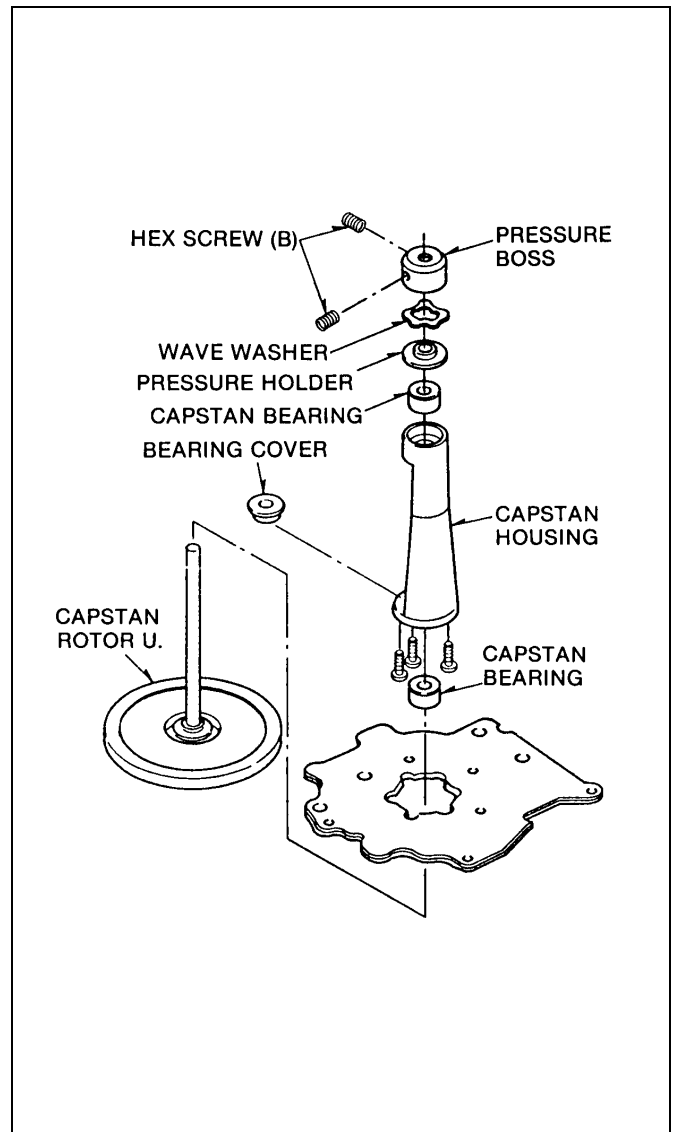


Figure 7-10-2 Capstan Motor Removal

(Installation)

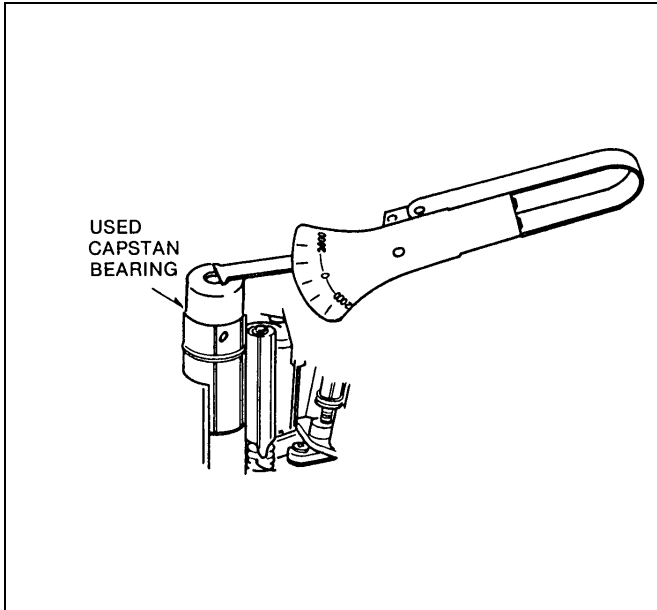
1. Follow the previous steps in reverse order.

(Adjustment) (Capstan Installation Pressure Setting)

*Tools required

Fan Type Tension Gauge (VFK66)

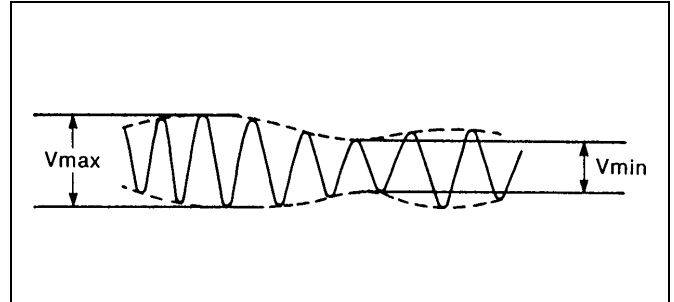
1. Loosen 2 hex screws on Pressure Boss.
2. Place used Capstan Bearing on the Pressure Boss.
3. Apply a pressure of $7850\text{mN} \pm 490\text{mN}$ ($800\text{gf} \pm 50\text{gf}$) to the top surface with a tension gauge.
4. Tighten 2 hex screws and glue it using paint lock.



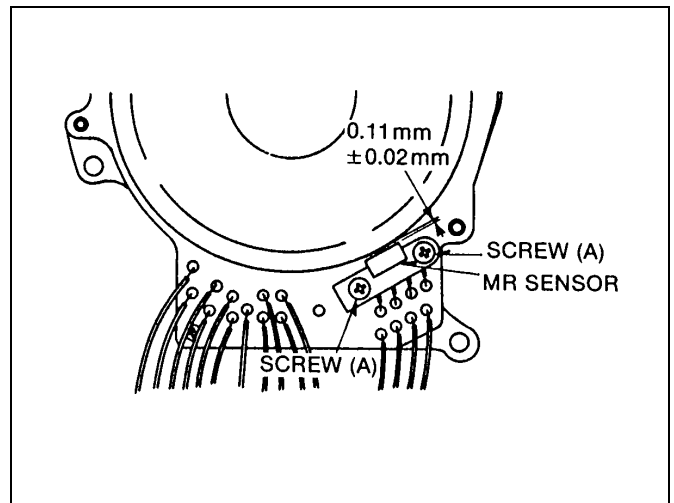
Capstan FG Confirmation

Test Point P2002-7A, 7B (M1 Board)
Spec. $V_{\min} \geq 2.0V_{p-p}$
 $V_{\max} \geq 3.0V_{p-p}$

1. Rotate Capstan Motor by hand and confirm that FG waveform at P2002-7A and 7B are in the specification above.



2. If it is not, loosen 2 screws (A) on Capstan stater P.C. Board and adjust MR Sensor position so that the clearance between MR sensor and Rotor is $0.11\text{mm} \pm 0.02\text{mm}$.
3. Tighten 2 screws (A).



7-11. Pinch Solenoid and Pinch Press Lever Replacement and Adjustment

7-11-1. Pinch Solenoid Replacement

(Removal)

1. Remove bottom panel and side panel.
2. Remove L1, L2, M1 P.C. board and shield plate.

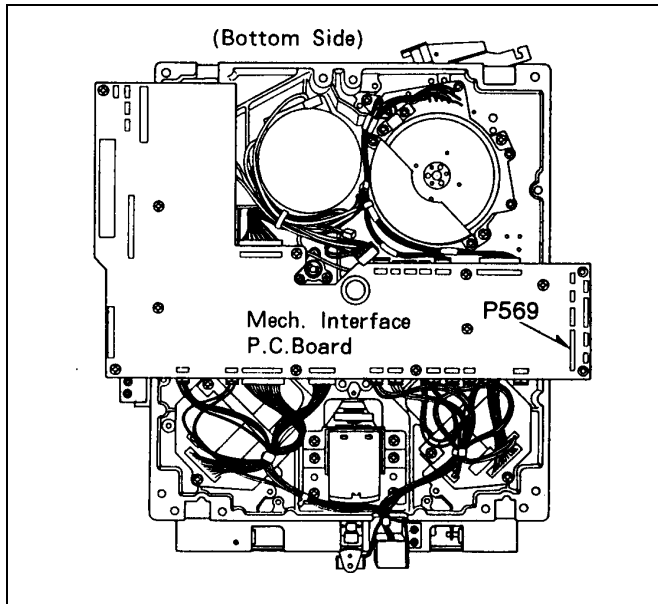


Figure 7-11-1 Pinch Solenoid Connector (P569) Removal

3. Disconnect connector P569 on Mech. Interface P.C. Board as shown in figure 7-11-1.
4. Unscrew 3 Screws (A) and hand off Pinch Solenoid Unit as shown in figure 7-11-2.

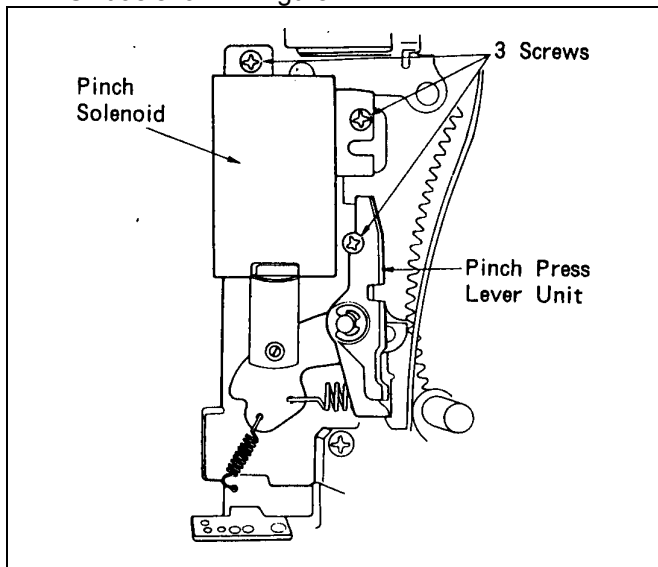


Figure 7-11-2 Pinch Solenoid Removal

(Installation)

1. Follow the previous steps in reverse order. After installation is completed, execute the steps described in Sec. 7-11-4, "Pinch Solenoid Position Adjustment."

7-11-2. Pinch Press Lever Replacement

(Removal)

1. Remove pinch solenoid Unit (Refer to 7-11-1. Pinch Solenoid Replacement section).
2. Remove spring as shown in Figure 7-11-3.
3. Remove E-ring and washer as shown in Figure 7-11-3.
4. Remove Pinch Press Lever.

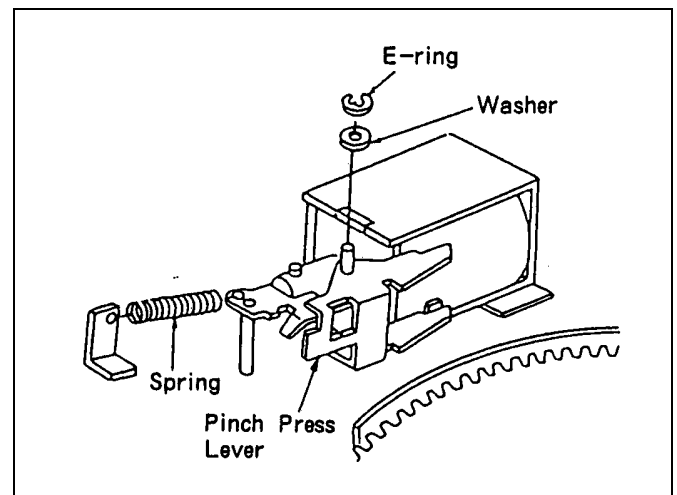


Figure 7-11-3 Pinch Press Lever Removal

(Installation)

1. Install new Pinch Press Lever and follow the removal steps in reverse order.
2. After installation is completed, execute the steps described in Sec. 7-11-3, "Pinch Press Lever Position Adjustment."

7-11-3. Pinch Press Lever Position Adjustment

*Tools required

Eccentric screwdriver (VFK0358)

1. Insert a cassette tape that can be damaged.
2. After tape is loaded, press READY OFF button to be in pinch solenoid off mode.
3. Loosen 2 screws (A) and insert eccentric screwdriver (VFK0358) into hole (B) as shown in figure 7-11-4.
4. Turn eccentric screwdriver so that the clearance (C) is $1.1 \pm 0.1\text{mm}$ as shown in figure 7-11-4.
5. Tighten 2 screws (A).

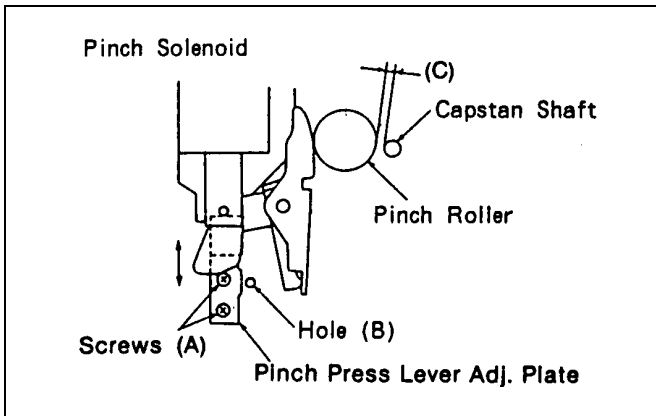


Figure 7-11-4 Pinth Press Lever Adjustment

7-11-4. Pinch Solenoid Position Adjustment

*Tools required

Eccentric screwdriver (VFK0358)

Fan type Tension Gauge (VFK66)

Note:

Before this adjustment, Pinch Press Lever Adjustment must be completed.

1. Remove top panel.
2. Remove front loading unit.
3. Insert a cassette tape that can be damaged.
4. After tape is loaded, press STILL button.
5. Confirm that clearance (B), which is shown in figure 7-11-5, is $1.3\text{mm} \pm 2\text{mm}$.

6. If not, loosen 3 screws (A) as shown in figure 7-11-5 and insert eccentric screwdriver (VFK0358) into hole (C).
7. Adjust Pinch roller solenoid position with eccentric screwdriver (VFK0358) so that the clearance (B) is $1.3\text{mm} (\pm 0.2\text{mm})$.
8. Tighten 3 screws (A).
9. Insert a 1.2mm thickness gauge to clearance (B).
10. Place fan type tension gauge (VFK66) so that its tip contacts the position (D) as shown in figure 7-11-5.
11. Push tension gauge in the direction indicated by arrow (E) in figure 7-11-5.
12. Confirm that the 1.2mm thickness gauge moves when fan type tension gauge (VFK66) indicates $14200\text{mN} \pm 980\text{mN}$ ($1450\text{gf} \pm 100\text{gf}$).
13. If it is not, change the position of spring as shown in figure 7-11-5.

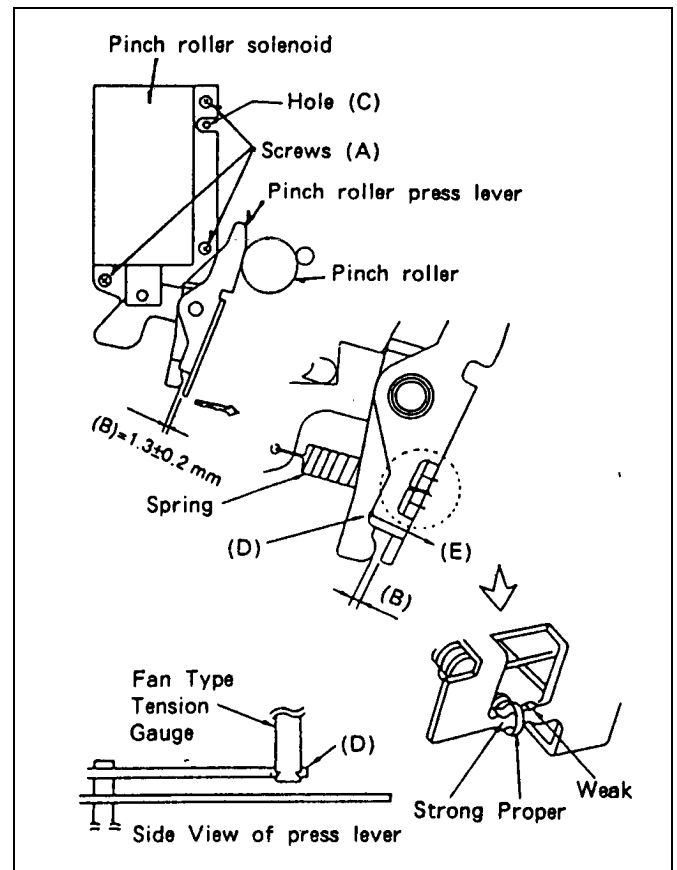


Figure 7-11-5 Pinch Solenoid Adjustment

7-12. Tension spring Plate Replacement.

(Removal)

1. Remove top panel.
2. Remove front loading unit.
3. Loosen hex. screw (A) and pull off the Tension Arm Unit as shown in figure 7-12-1.

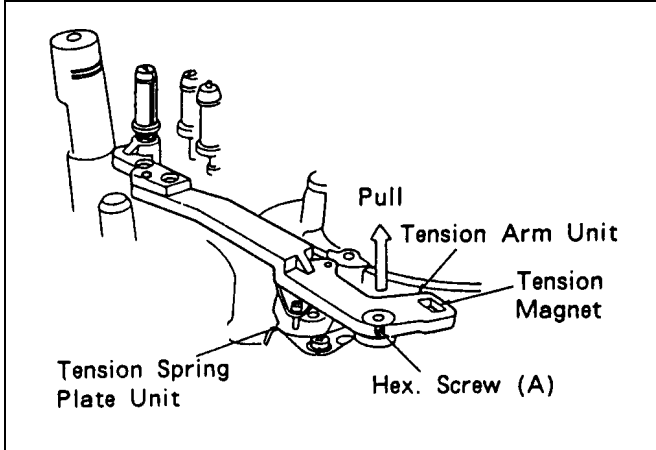


Figure 7-12-1 Tension Arm Unit

4. Unscrew screw (B) and remove Tension Spring Plate Unit as shown in figure 7-12-2.

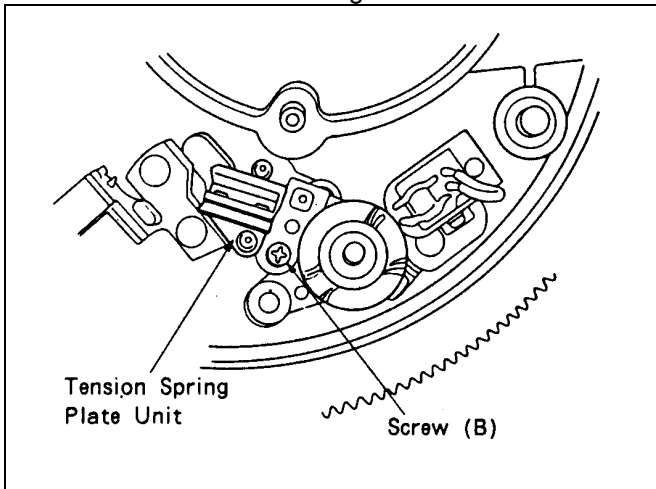


Figure 7-12-2 Tension spring Plate Unit

(Installation)

1. Follow the previous steps in reverse order.

Note:

To install the Tension Arm Unit, pushing shaft (C) from bottom side of the mech. In this case, remove bottom plate and P.C. Boards. Chassis shown in figure 7-12-3.

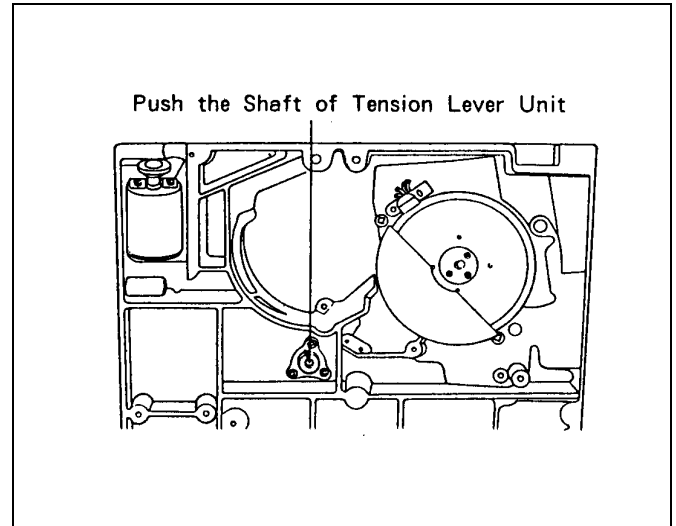


Figure 7-12-3 Tension arm Unit Installation

<Magnet Height Adjustment>

1. Turn power off.
2. Remove top panel and front loading unit.
3. Turn power on.
4. Go to TEST menu and execute following settings.
TEST → MECHA → NO FRLD (NO FRONT LOADING) → STOP
5. Check the clearance (A) between magnet and sensor. This clearance should be between $0.5 \pm 0.1\text{mm}$ as shown in 7-12-4.
6. If not, loosen hex screw (C) and adjust height of the magnet so that the clearance (A) is within the specifications.
7. Tighten hex screw (C).

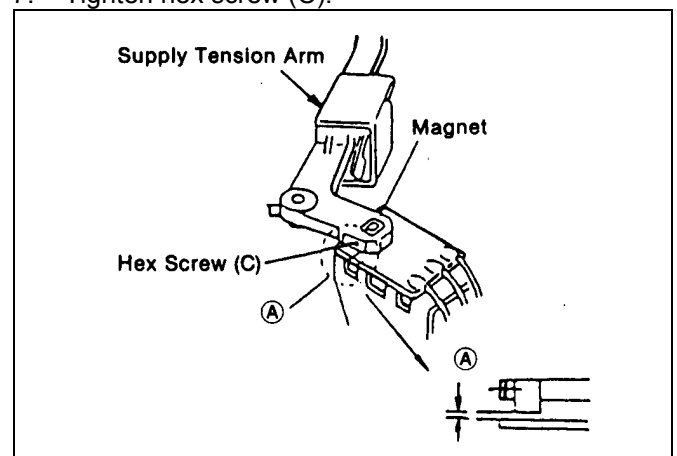


Figure 7-12-4

7-13.Loading Motor and Loading Motor Belt Replacement

7-13-1. Loading Motor Belt Replacement

(Removal)

1. Remove top panel.
2. Remove sensor P.C.Board.
3. Remove Loading Motor Belt to direction (A) as shown in Figure 7-13-1.

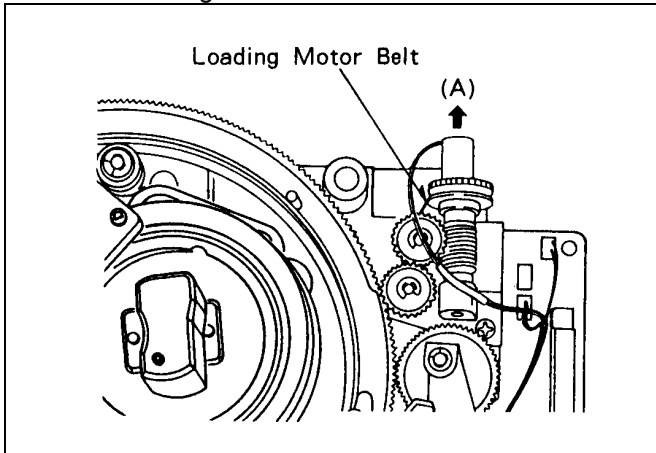


Figure 7-13-1 Loading Motor Belt Removal

(Instillation)

1. Put new loading belt onto loading motor first as shown in Figure 7-13-2.
2. Then replace onto worm gear pulley.
3. Install top panel.

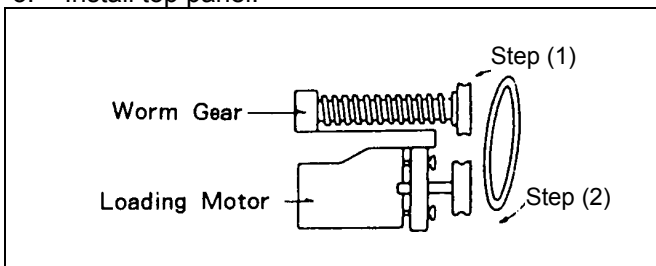


Figure 7-13-2 Loading Motor Belt Installation

7-13-2. Loading Motor Replacement

(Removal)

1. Remove top panel.
2. Unscrew 2 screws (B) and remove sensor P.C.Board as shown in figure 7-13-3.

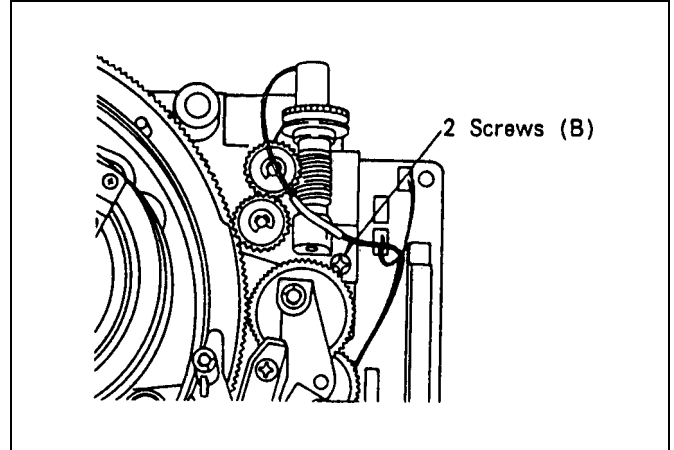


Figure 7-13-3 Loading Motor Base Unit Removal

3. Remove side panel and bottom panel.
4. Open front panel and remove all P.C.Board (L1, L2 and M1).
5. Unscrew 8 screws (C) and remove mechanical intermediate P.C.Board as shown in figure 7-13-4.
6. Unsolder 2 lead wires on Loading Motor and unscrew 2 screws (C), then remove Loading Motor as shown in Figure 7-13-5.

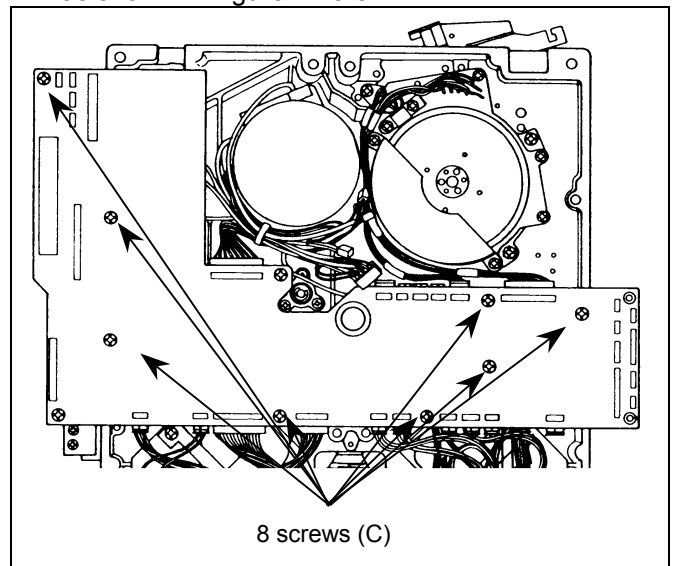


Figure 7-13-4 Mech. Intermediate P.C. Board Removal

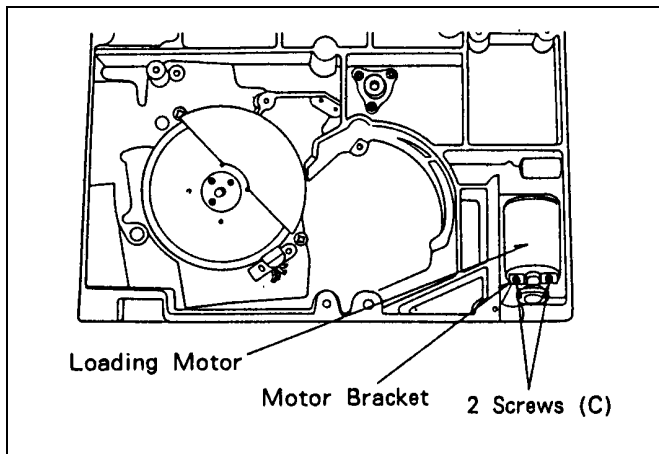


Figure 7-13-5 Loading Motor Removal

(Instillation)

1. Install new loading motor in reverse order of the removal procedure.
2. Confirm that there is no problem during loading.

7-14. Front Loading Motor Replacement

(Removal)

1. Remove top panel.
2. Remove front loading unit.
3. Unscrew 6 screws (A) and unsolder 2 lead wires on Loading Motor as shown in Figure 7-14-1.
4. Remove Front Loading Motor Unit and Left Side Plate as shown in Figure 7-14-1.
5. Unscrew 2 screws (B) and remove Front Loading Motor as shown in Figure 7-14-1.

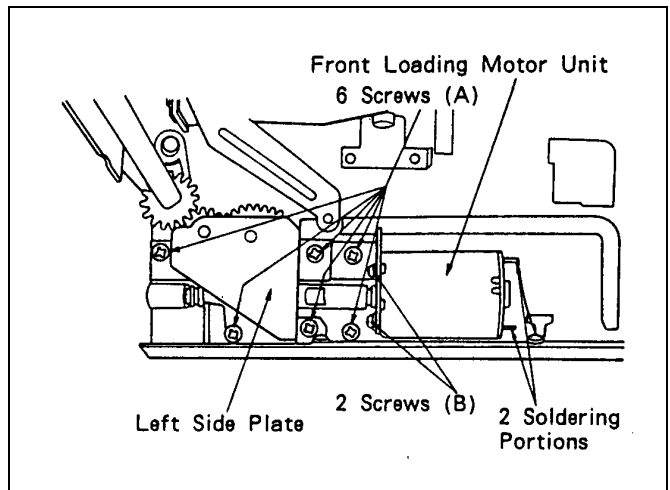


Figure 7-14-1 Loading Motor Removal

(Instillation)

1. Install new front loading motor in reverse order of the removal procedure.
2. Insert a cassette into VTR and confirm that there is no problem during loading.

7-15. Fan Motor Replacement

(Removal)

1. Unscrew 9 screws (A) and open Rear Panel as shown in figure 7-15-1.

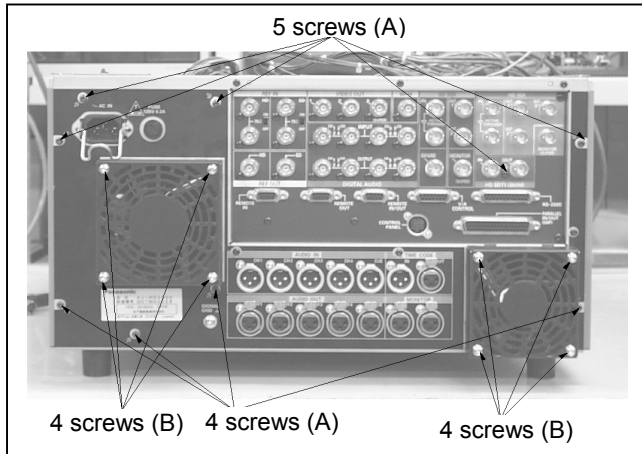


Figure 7-15-1 Rear Panel Removal.

2. Disconnect connector as shown in figure 7-15-2.

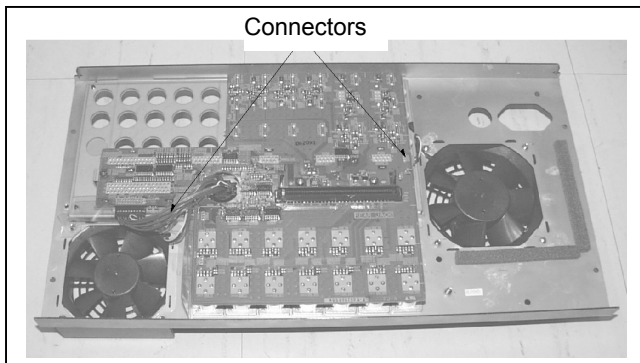


Figure 7-15-2 Fan Motor Removal

3. Unscrew 4 screws (B) as shown in figure 7-15-1 and pull fan motor away from the rear panel.

(Installation)

1. Follow the previous steps in reverse order.

7-16. Eject Switch Replacement

(Removal)

1. Unscrew 4 screws (A) and pull Front Panel forward as shown in Figure 7-16-1.

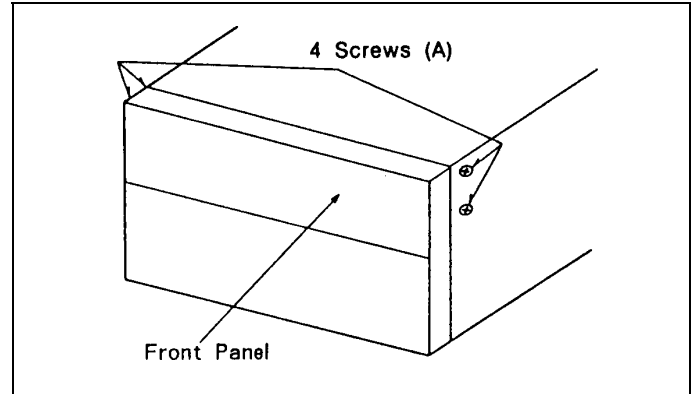


Figure 7-16-1 Front Panel Removal

2. Unscrew 2 screws (B), then remove Eject Switch P.C.Board shown in Figure 7-16-2.

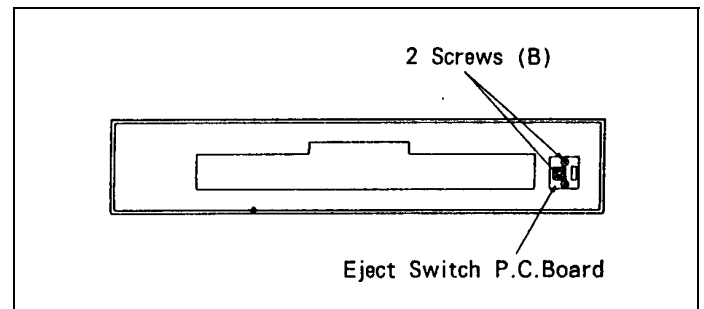


Figure 7-16-2 Eject Switch P.C. Board Removal

3. Unsolder 6 soldered points shown in figure 7-16-3.

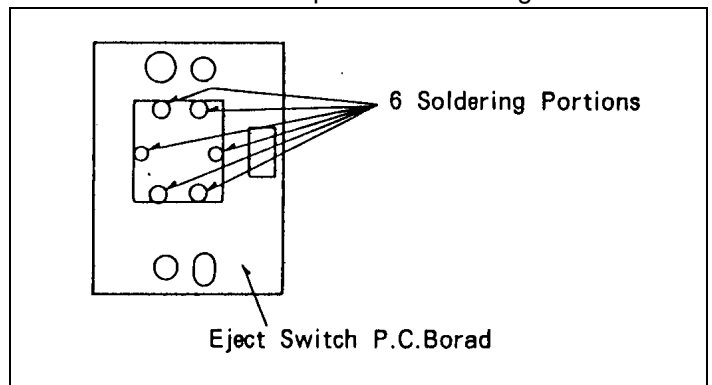


Figure 7-16-3 Eject Switch Removal

(Installation)

1. Follow the previous steps in reverse order.

7-17. Power Switch Replacement

(Removal)

1. Unscrew 4 screws (A) and pull Front Panel forward as shown in Figure 7-17-1.

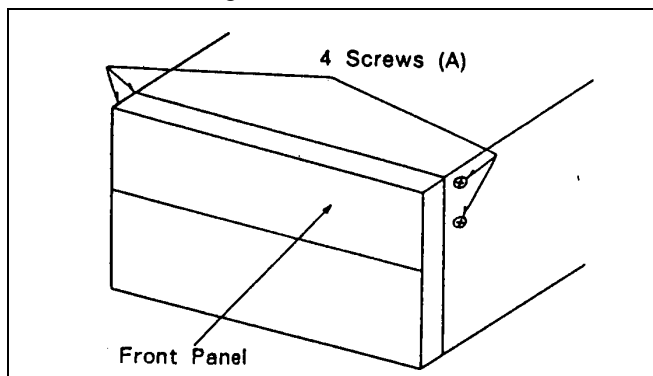


Figure 7-17-1 Front Panel Removal

2. Unscrew 3 screws (B) and remove Power Switch Angle as shown in Figure 7-17-2.

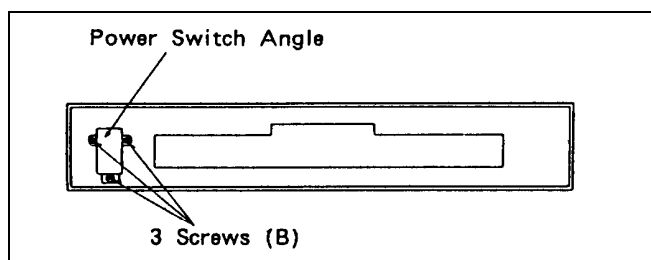


Figure 7-17-2 Power Switch Angle Removal

3. Unscrew 2 screws (C) and unsolder wires as shown in Figure 7-17-3.

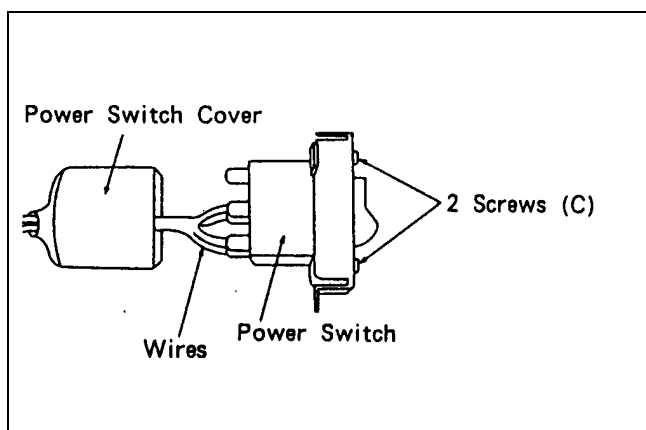


Figure 7-17-3 Power Switch Removal

(Installation)

1. Follow the previous steps in reverse order.

7-18. IP Base Unit Replacement

(Removal)

1. Remove top panel.
2. Loosen the Hex. screw (C) and remove E-Ring (A), 2 washers (B), IP Base Spring and IP Base Unit as shown in Figure 7-18-1.

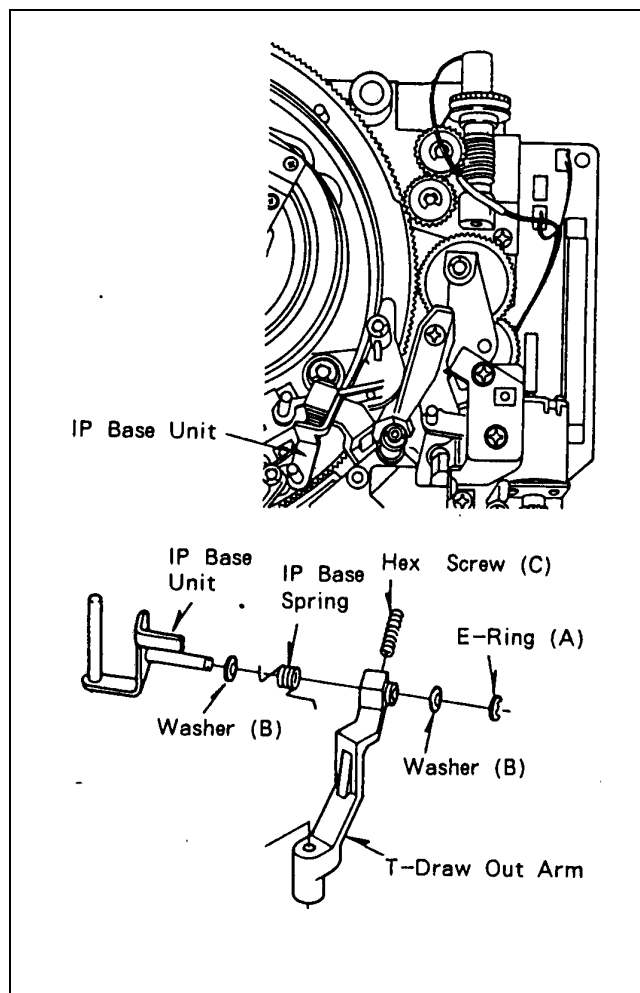


Figure 7-18-1 IP Base Unit Removal

(Installation)

1. Follow the previous steps in reverse order.
2. Adjust IP base unit inclination. Refer to "Inclined Post Angle Confirmation and Adjustment" procedure.

7-19.CAM Gear Replacement and Adjustment

(Removal)

1. Turn Loading Ring to be in loading completion position by each gear.
2. Remove 3 screws (A) and P12 Post Base as shown in figure 7-19-1.

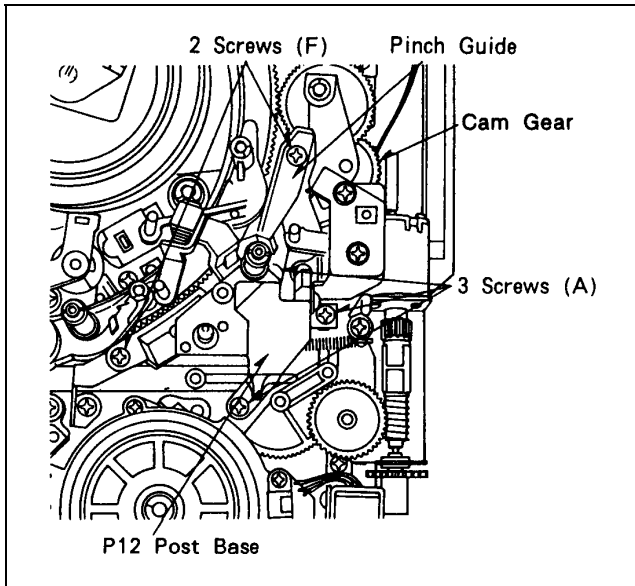


Figure 7-19-1 Cam Gear Removal (1)

3. Remove E-Ring (B) and Washer (C), then remove Slant Drive Angle, Drive Angle and Slant Charge Spring as shown in figure 7-19-2.
4. Remove E-Ring (D), Washer (E) and Drive Plate Unit as shown in figure 7-19-2.

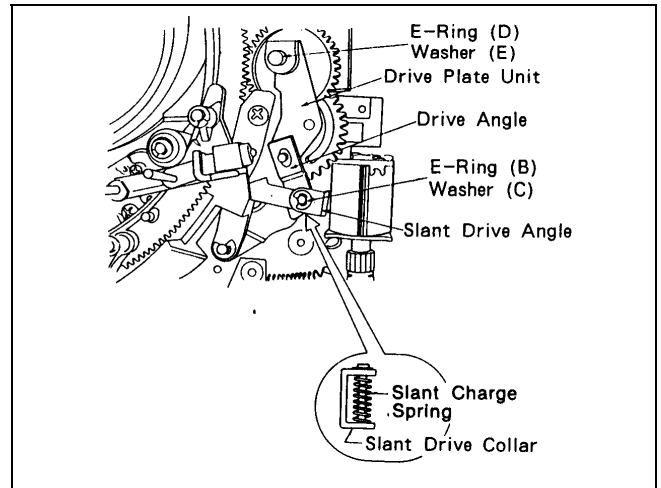


Figure 7-19-2 Cam Gear Removal (2)

5. Unscrew 2 screws (F) and remove Pinch Guide (Plastic) as shown in figure 7-19-1.
6. Remove screw (G) and remove the Pinch Guide Bracket as shown in figure 7-19-3.
7. Remove Intermediate Gear, E-Ring (H), Washer (I) and Cam Gear as shown in figure 7-19-3.

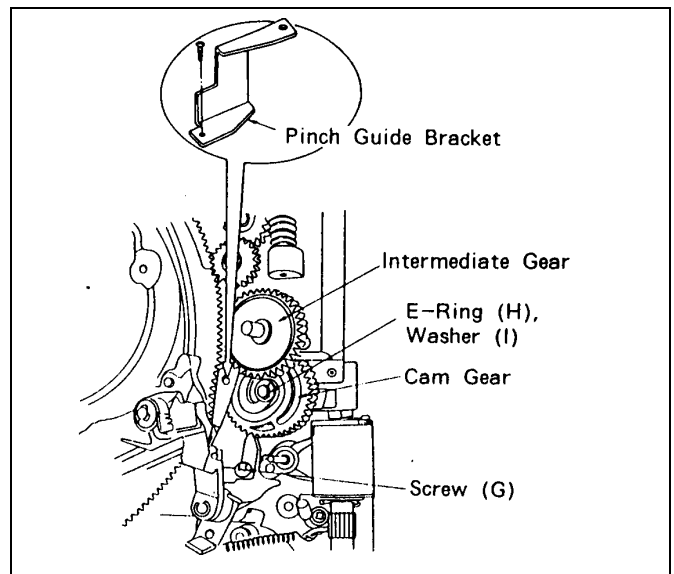


Figure 7-19-3 Cam Gear Removal (3)

(Installation)

1. Follow the previous steps in reverse order, then Cam Gear Phase Adjustment should be performed.

<CAM Gera Phase Adjustment>

1. To install Intermediate Gear and Cam Gear, be sure the holes a and b match with the holes a' of the Intermediate Gear and b' of the Cam Gear as shown in figure 7-19-4.
2. To install Drive Plate, be sure the pin of the Drive Plate matches with the groove position (C) of Cam Gear as shown in figure 7-19-4.

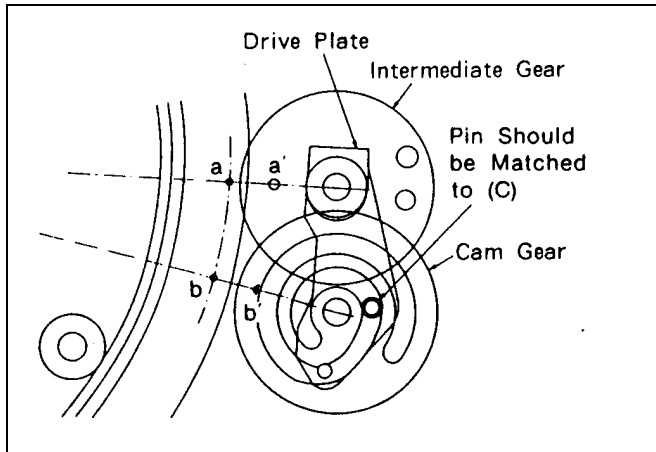


Figure 7-19-4 Cam Gear Phase Adjustment

7-20. Ring Roller Unit Replacement

(Removal)

1. Unscrew 2 screws (A) and remove Ring Roller Unit as shown in figure 7-20-1.

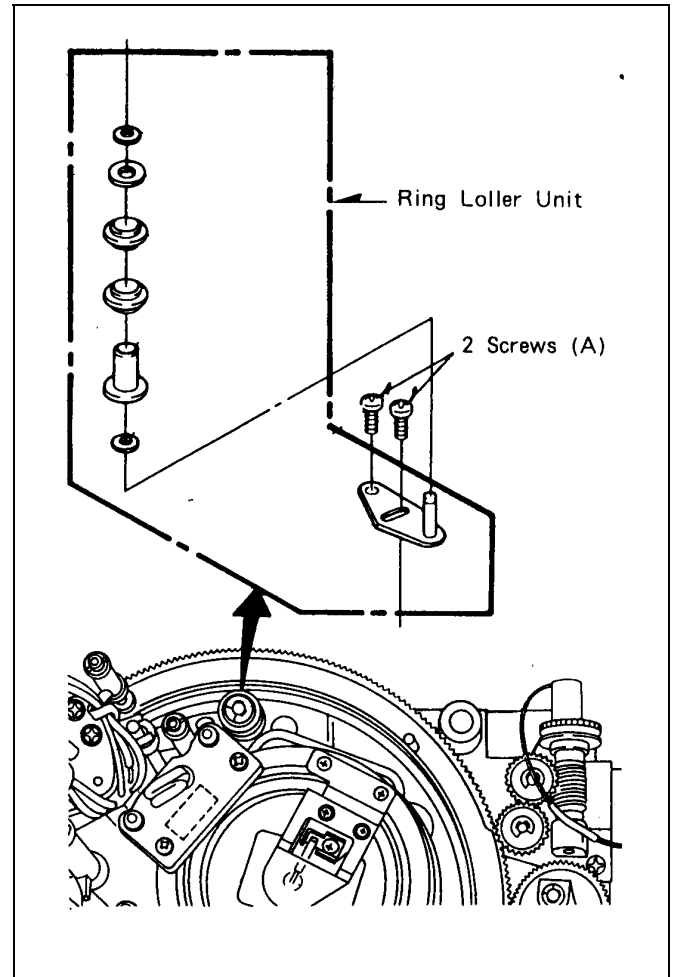


Figure 7-20-1 Ring Roller Unit Removal

(Installation)

1. Install Ring Roller Unit and tighten 2 screws (A) as shown in figure 7-20-1.

7-21.Sub Loading Mortor Repalacment

(Removal)

1. Remove top panel.
2. Remove front loading unit.
3. Remove E-Ring (A), Washer (B), Decrease Gear and 2 screws (C) then remove Sub Loading Motor Unit as shown in figure 7-21-1.
4. Unsolder 2 lead wires (D) as shown in figure 7-21-1.
5. Unscrew 2 screws (E), then remove Sub Loading Motor as shown in figure 7-21-1.

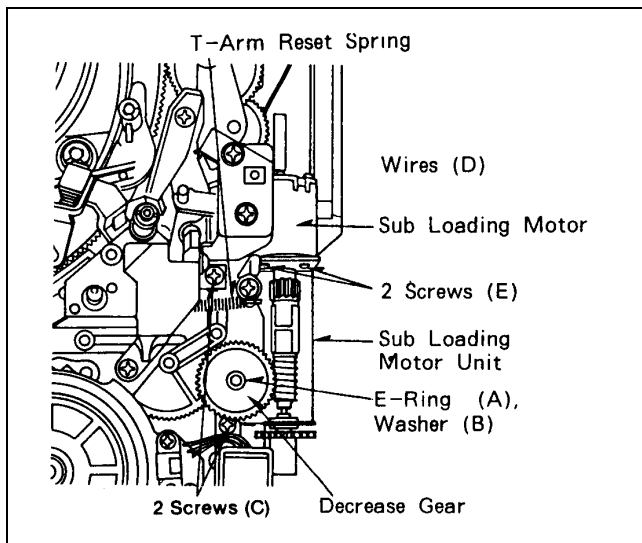


Figure 7-21-1 Sub Loading Motor Removal

(Installation)

1. Follow the previous steps in reverse order.

7-22.Stopper solenoid Replacement and Adjustment

1. Remove side panel and bottom panel.
2. Remove L1, L2 and M1 P.C. Board.
3. Unscrew 2 screws (A) and remove Solenoid Holder as shown in figure 7-22-1.
4. Unsolder lead wires on stopper solenoid.
5. Unscrew 2 screws (B) and remove Stopper Solenoid as shown in figure 7-22-1.

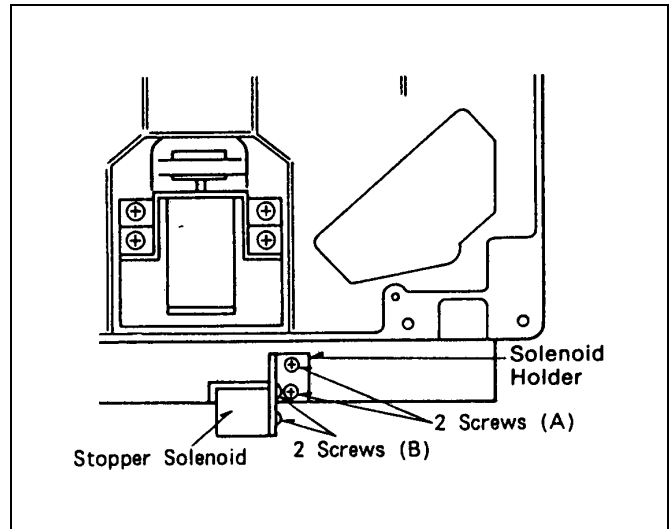


Figure 7-22-1 Stopper Solenoid Removal

(Installation)

1. Follow the previous steps in reverse order, then Stopper Solenoid position should be adjusted as follows.

<Stopper Solenoid Position Adjustment>

1. Confirm that Reel Base Unit is on the small cassette position.
2. Loosen 2 screws (B), move Stopper Solenoid to direction (C) so that the clearance (D) is $0.2 \pm 0.1\text{mm}$ as shown in figure 7-22-2.
3. After adjustment, tighten 2 screws (B).

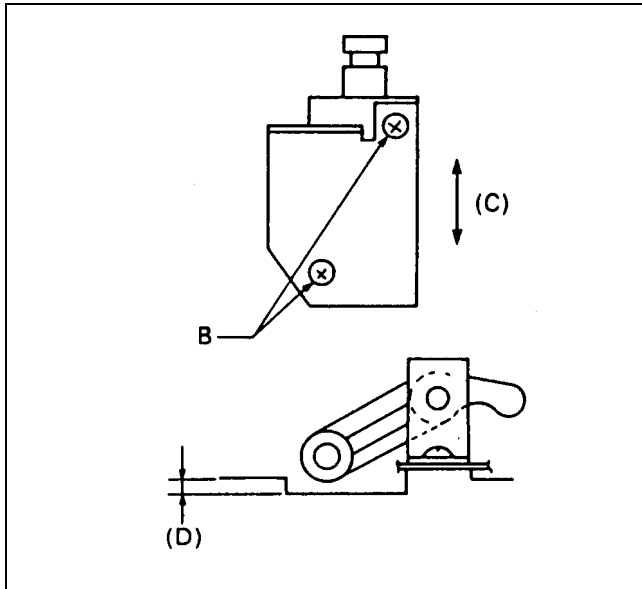


Figure 7-22-2 Stopper Solenoid Position Adjustment

7-23. Worm motor Unit Replacement Reel Position Change Motor

(Removal)

1. Remove side panel and bottom panel.
2. Remove L1, L2, M1 P.C. Board and shield plate.
3. Unsolder lead wires on Worm Motor Unit.
4. Unscrew 2 screws (A) and remove Timing Belt and Worm Motor Unit as shown in figure 7-23-1.

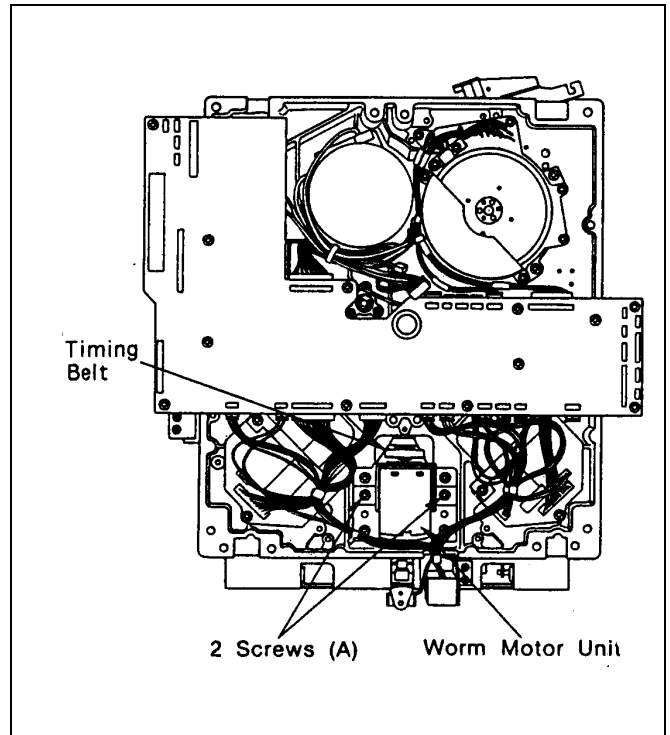


Figure 7-23-1 Worm Motor Unit Removal

(Installation)

1. Follow the previous steps in reverse order.

7-24. Loading / Sub Loading Completion and Un Loading / Sub Loading Completion Switches Position Adjustment

*Tools required

Fine adjustment driver (VFK0446)

(Adjustment)

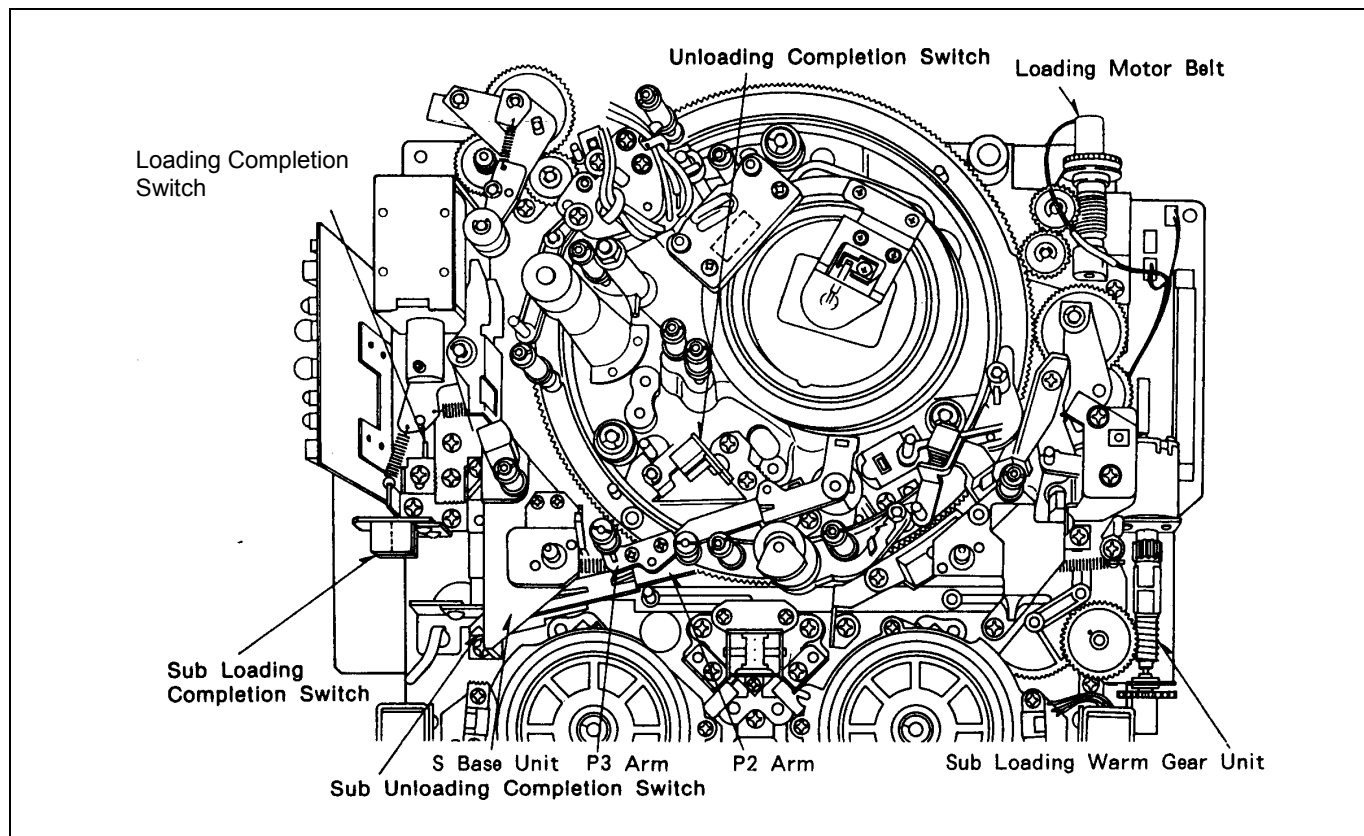


Figure 7-24-1 Loading/Unloading, Sub Loading/Sub Unloading Completion Switch

<Loading Completion Switch Position Adjustment>

1. Remove top panel.
2. Turn Loading Motor Belt to loading completion.
3. Loosen 2 screws (A) as shown in figure 7-24-2.
4. Insert fine adjustment driver (VFK 0446) into the hole (B) as shown in 7-24-2.
5. Turn fine adjustment driver so that the clearance (C) is $1.8 \pm 0.2\text{mm}$ as shown in figure 7-24-2.
6. Tighten 2 screws (A).

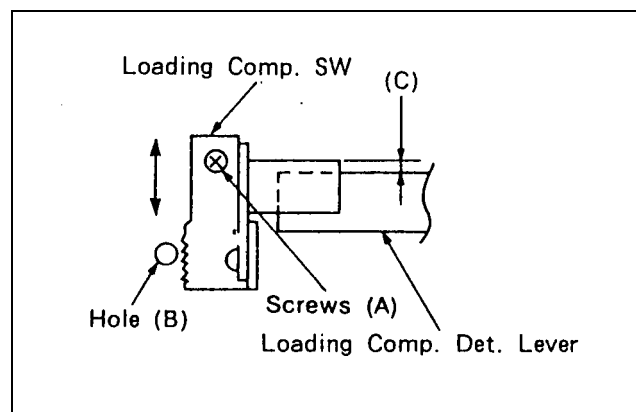


Figure 7-24-2 Loading Completion Switch

<UnLoading Completion Switch Position Adjustment>

1. Turn Loading Motor Belt to unloading completion.
2. Loosen 2 screws (D) as shown in figure 7-24-3.
3. Insert Fine adjustment driver (VFK0446) into the hole (E) as shown in 7-24-3.
4. Turn Fine adjustment driver (VFK0446) so that the clearance (F) is $1.8 \pm 0.2\text{mm}$ as shown in figure 7-24-3.
5. Tighten 2 screws (D).

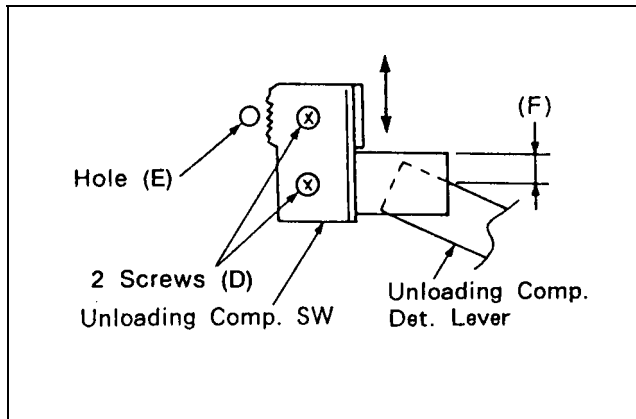


Figure 7-24-3 Unloading Completion SW

<Sub loading Completion Switch Position Adjustment>

1. Remove front loading unit.
2. Turn Sub Loading Worm Gear Unit so that P2 Arm just contacts with S Base Unit as shown in figure 7-24-1.
3. Loosen 2 screws (G) as shown in figure 7-24-4.
4. Insert Fine adjustment driver (VFK0446) into the hole (H).
5. Turn Fine adjustment driver (VFK0446) so that clearance (I) is $1 \pm 0.2\text{mm}$. as shown in figure 7-24-4
6. Tighten 2 screws (G).

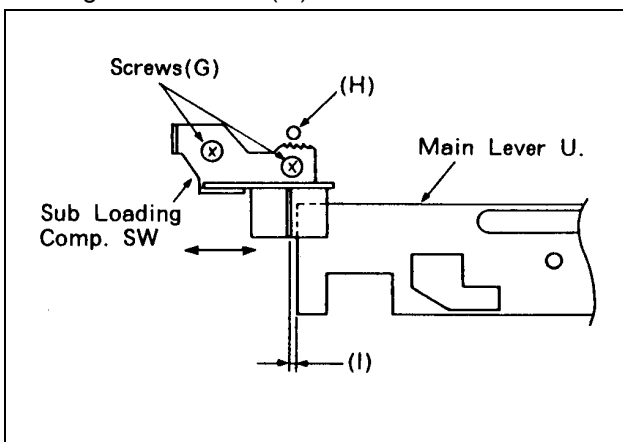


Figure 7-24-4 Sub loading completion Switch

<Sub unloading Completion Switch Position Adjustment>

1. Turn Sub Loading Worm Gear Unit by 1-1.5 rotation from the position that P2 Arm contacts with the P3 Arm.
2. Loosen 2 screws (J) as shown in figure 7-24-5.
3. Insert Fine adjustment driver (VFK0446) into the hole (K) as shown in 7-24-5.
4. Turn the Fine adjustment driver (VFK0446) so that (L) is $2.0 \pm 0.2\text{mm}$ as shown in 7-24-5.

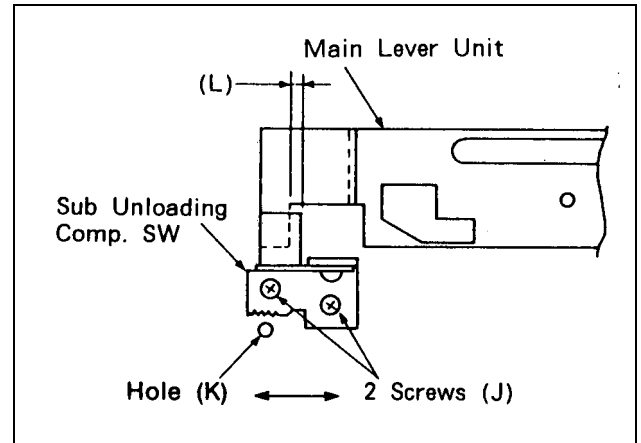


Figure 7-24-5 Sub unloading Completion SW

1. Hook up S0 base connector P2002-25a to oscilloscope.
2. Turn Sub Loading Worm Gear Unit by 1.5-1.75 rotation from the position that P2 Arm contacts with P3 Arm.
3. Under these conditions, confirm that the P2002-25a voltage is 1V - 4V.
4. If the voltage is out of the specification, loosen 2 screws (J) shown in figure 7-24-5 and insert fine adjustment driver into hole (K).
5. Move sensor switch until the voltage is within the specification.
6. After adjustment, tighten 2 screws (J).
7. Reinstall front loading unit and top panel.

7-25. Cleaner Roller Replacement

(Removal)

1. Remove top panel.
2. Unscrew 2 screws (A) and remove cleaner unit as shown in figure 7-25-1.

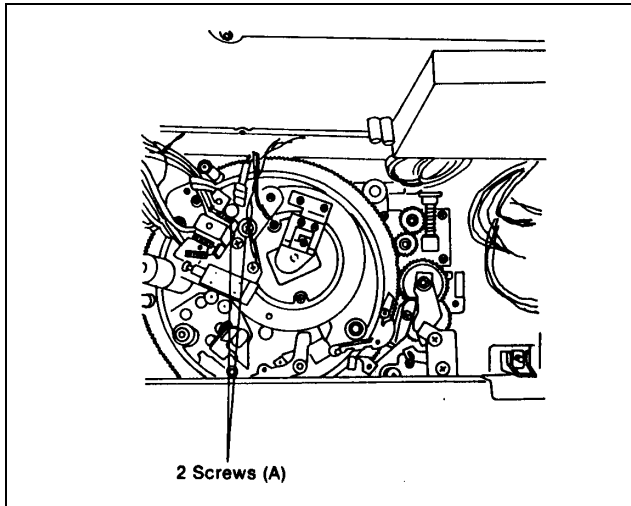


Figure 7-25-1 Cleaner Roller Unit Removal

3. Push cleaner roller by hand and remove roller stopper as shown in figure 7-25-2.
4. Pull out cleaner roller.

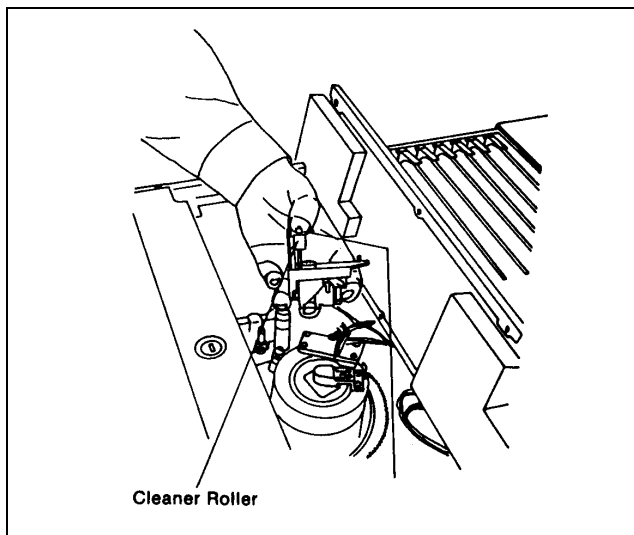


Figure 7-25-2 Cleaner Roller Removal

(Installation)

1. Follow the previous steps in reverse order.

7-26. Cleaner solenoid Replacement and Adjustment

(Removal)

1. Remove top panel.
2. Unscrew 2 screws (A) and remove cleaner unit as shown in figure 7-26-1.
3. Unscrew 2 screws (B) and remove cleaner solenoid unit as shown in figure 7-26-1.

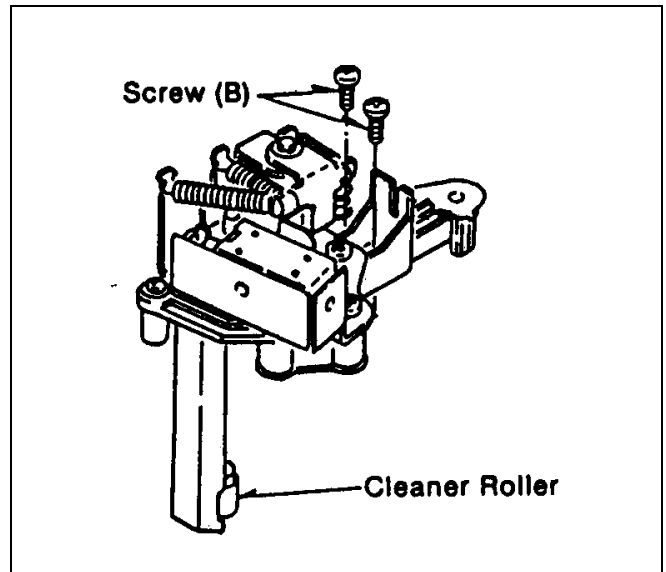


Figure 7-26-1 Cleaner Solenoid Removal

4. Unsolder 2 lead wires, then remove cleaner solenoid.

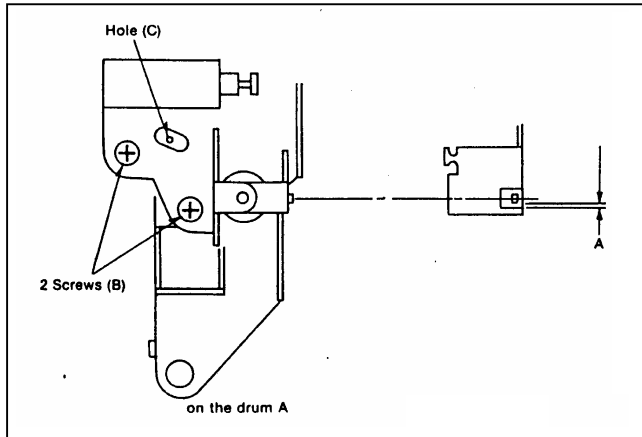
(Installation)

1. Follow the previous steps in reverse order. Position adjustment should be performed as follows.

<Cleaner Solenoid Position Adjustment>

1. Turn power ON.
2. Confirm that the clearance (A) is 0.3mm – 0.4mm as shown in figure 7-26-1.
3. If it is not, loosen 2 screws (B) and insert eccentric screwdriver (VFK0358) into the hole (C) as shown in figure 7-26-2.
4. Adjust the cleaner solenoid position with eccentric screwdriver (VFK0358) so that the clearance (A) is 0.3mm - 0.4mm as shown in 7-26-2.
5. Tighten 2 screws (B).

Figure 7-26-2 Cleaner Solenoid Adjustment



7-27. Supply Reel Table and Take up Reel Tabel Replacement and Adjustment

(Removal)

1. Remove top panel.
2. Remove front loading unit.
3. Remove E-rings (A) and washers (B) and pull out the supply reel table and take up reel table as shown in figure 7-27-1.

Note:

Pull out reel tables gently and be careful not to drop them; If it is dropped, the bearings inside reel tables will be damaged.

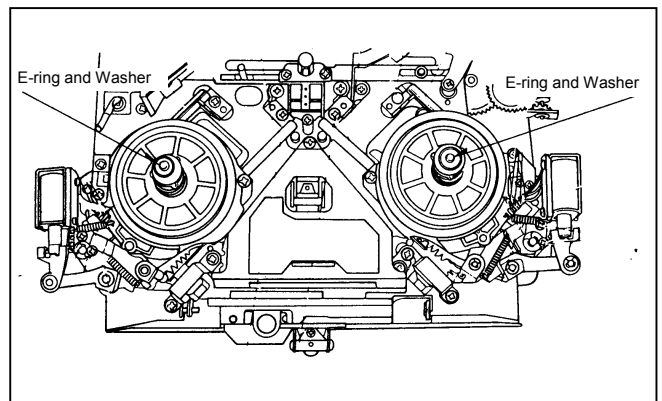


Figure 7-27-1 Supply and Take Up Reel Table Removal

<Reel Table Height Adjustment (Factory Adjustment)>

*Tools Required

Reel Height Adjustment Tool (VFK0772)

1. Remove top panel.
2. Remove front loading unit.
3. Install Mech. neutral adjustment plate on reel table correctly.
4. Set reel height adjustment tool (VFK0772) on reel table as shown in figure 7-27-2.
5. Confirm that the (A) position is flat as shown in figure 7-27-2.
6. If it is lower than plate, install washer (XWGV4Z7G or XWGV4Y7G) between reel base and reel table.
7. If it is higher plate, remove washer between reel base and reel table.
8. Reinstall front loading unit and top panel.

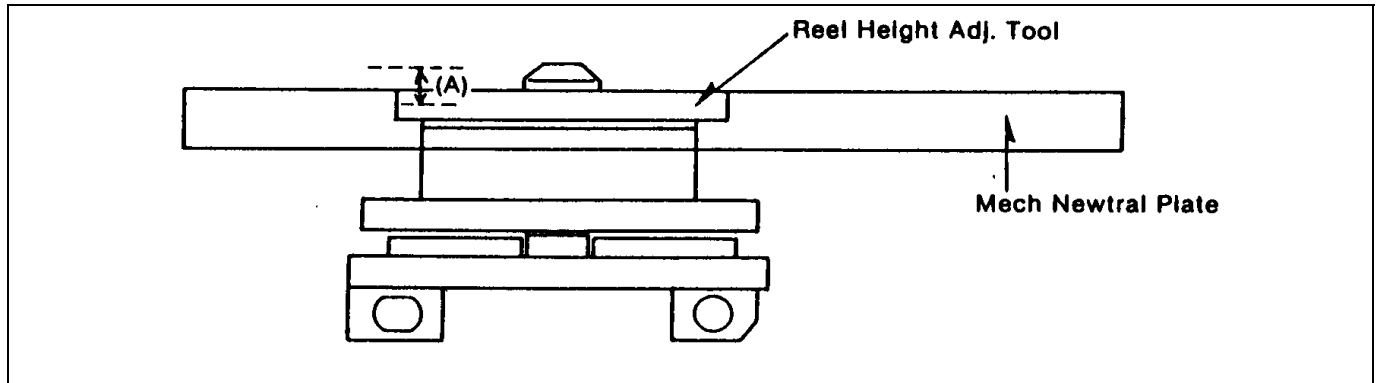


Figure 7-27-2 Reel Table Height Adjustment

7-28. Buffer Arm Replacement

(Removal)

1. Remove E-ring and washer and pull out T. Buffer Arm as shown in Figure 7-28-1.

(Installation)

1. Install T.Buffer Arm following the previous steps in reverse order.

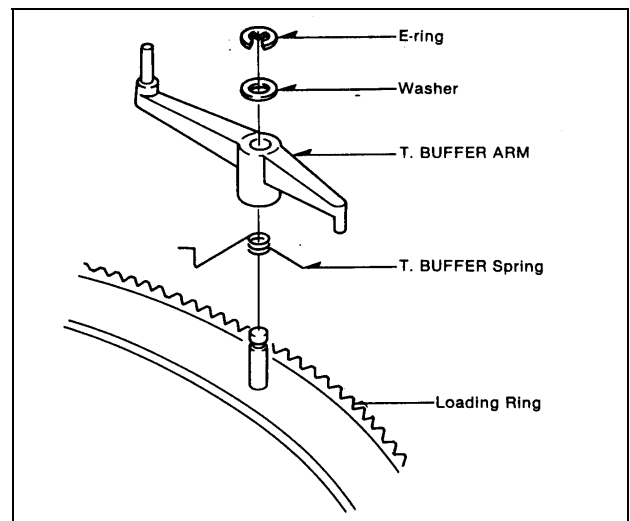


Figure 7-28-1

7-29. A/C Head Cleaner Unit Replacement

(Removal)

1. Turn sub loading motor to sub loading completion mode.
2. Pushing ring driver gear, turn the loading ring counterclockwise until screw (A) appear on A/C head cleaner unit as shown in Figure 7-29-1.
3. Unscrew screw (A) and remove A/C head cleaner unit.
4. Remove loading sensor unit from A/C head cleaner Unit.

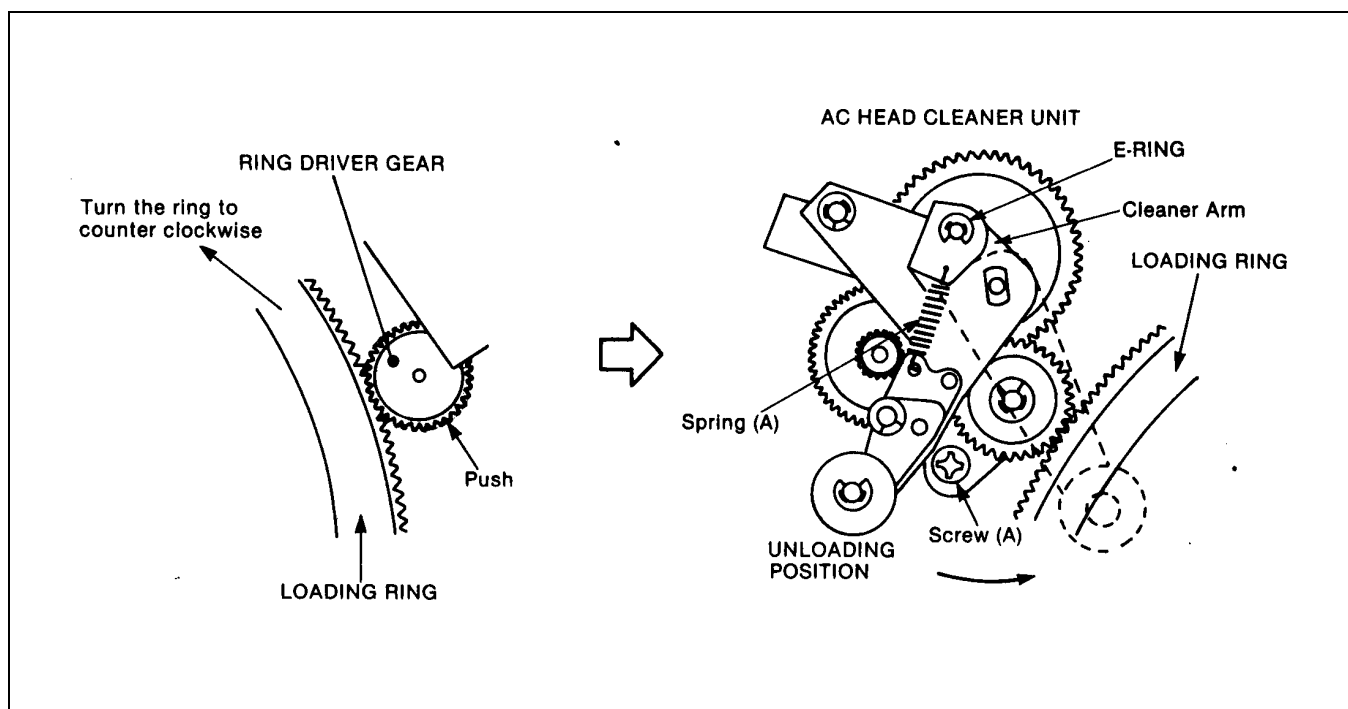


Figure 7-29-1

(Installation and Adjustment)

VTR Condition: UNLOADING MODE.

1. Insert A/C head cleaner unit in the Mechanical chassis unit as shown in Figure 7-29-2.

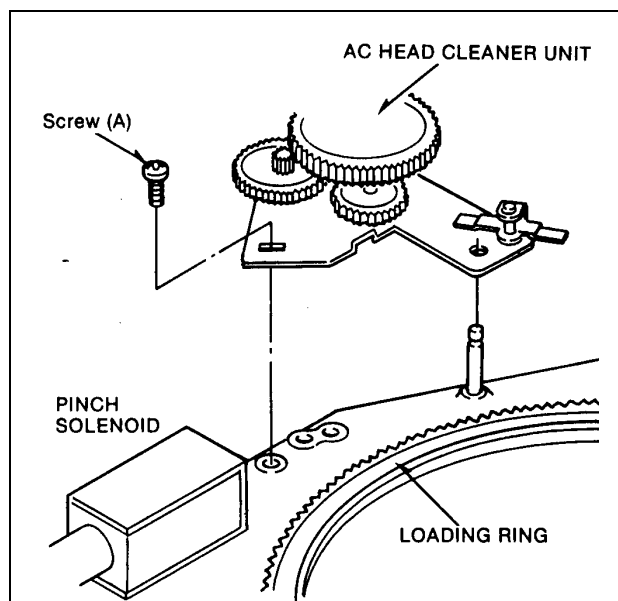


Figure 7-29-2

2. With intermediate gear and ring gear disengaged as shown in figure 7-29-3, rotate drive cam gear so that the hole in drive cam gear match with the hole in cleaner base.

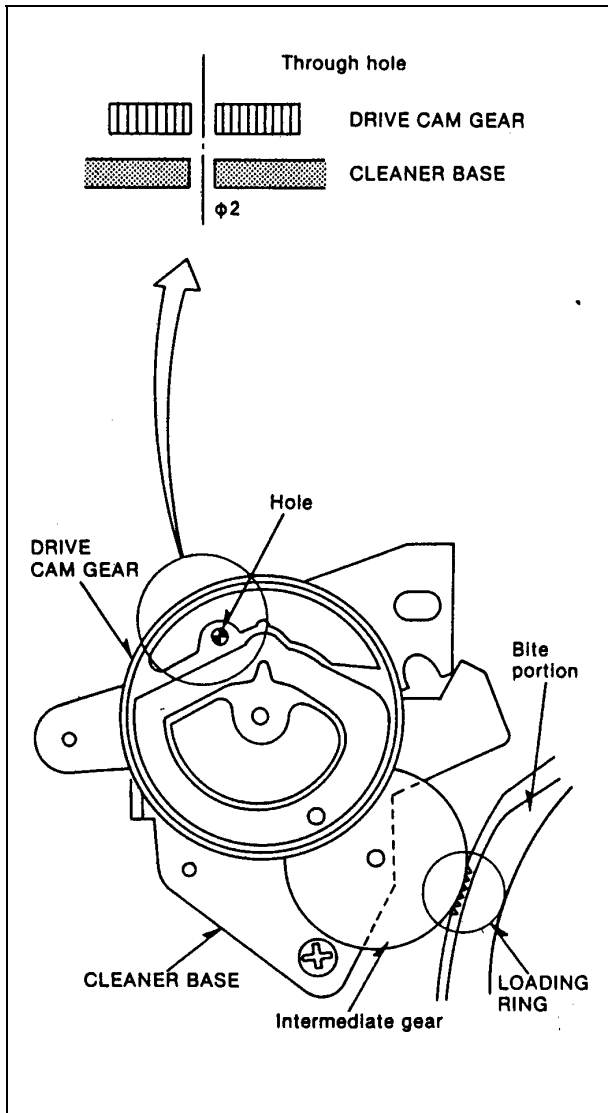


Figure 7-29-3

3. Insert a screwdriver into the aligned holes and temporarily tighten screw (A) as engaging the cam gear and ring gear.
4. With ring drive gear pushed down, rotate loading ring manually and confirm that it does not contact a post or other part as it moves. Then tighten screw (A).
5. Install loading sensor unit.

CAUTION:

After loading sensor unit is installed, its position must be adjusted. (Refer to Sec. 7-24, "Loading/Unloading/Sub Loading/Sub Unloading Completion Switch Position Adjustment.")

7-30. A/C Head Cleaner Pad Replacement

(Removal)

1. Remove E-ring and pull out cleaner arm as shown in Figure 7-30-1.
2. Remove two cleaner caps and pull out two cleaner pads as shown in Figure 7-30-1.

(Installation)

1. Install cleaner pad following the previous steps in reverse.

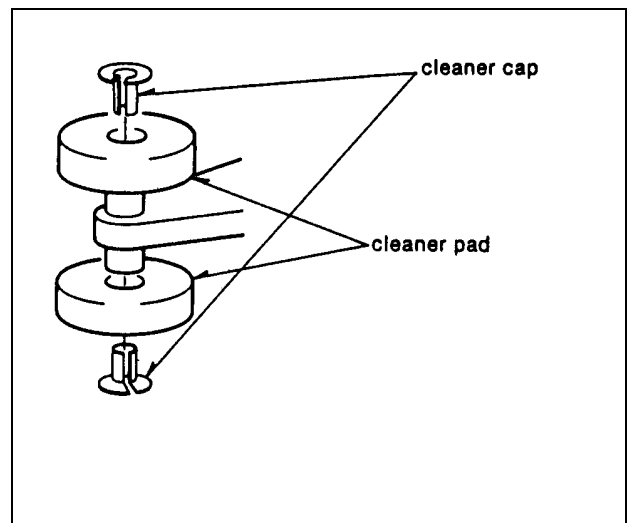
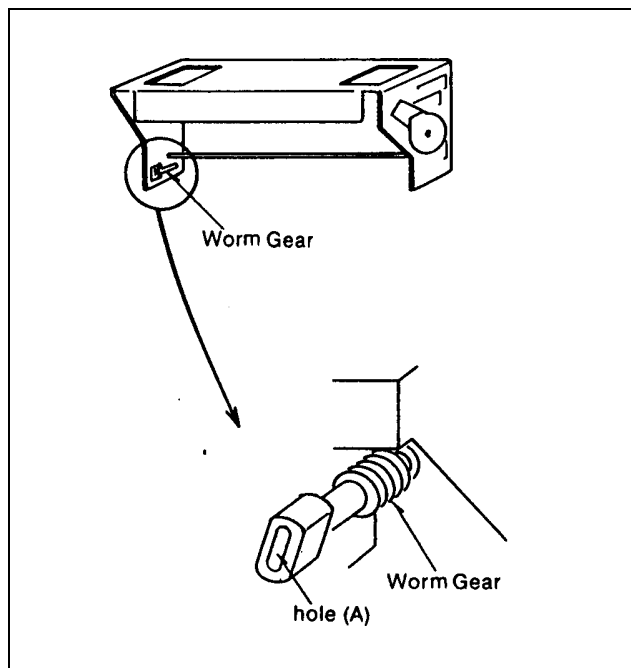
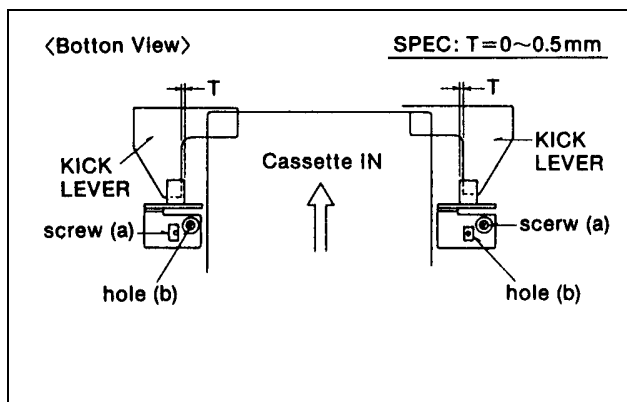


Figure 7-30-1

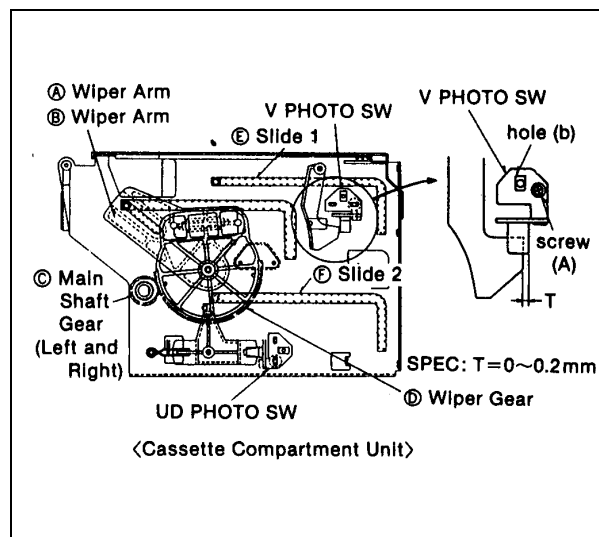
7-31. Cassette in SW Adjustment

1. Remove front loading unit.
2. Insert a L-cassette into removed front loading unit but do not load it.
3. Loosen 2 screws (A) and insert eccentric screwdriver into the hole (B).
4. Adjust SW position so that the gap (T) is 0mm ~ 0.5mm.
5. Tighten 2 screws (A).



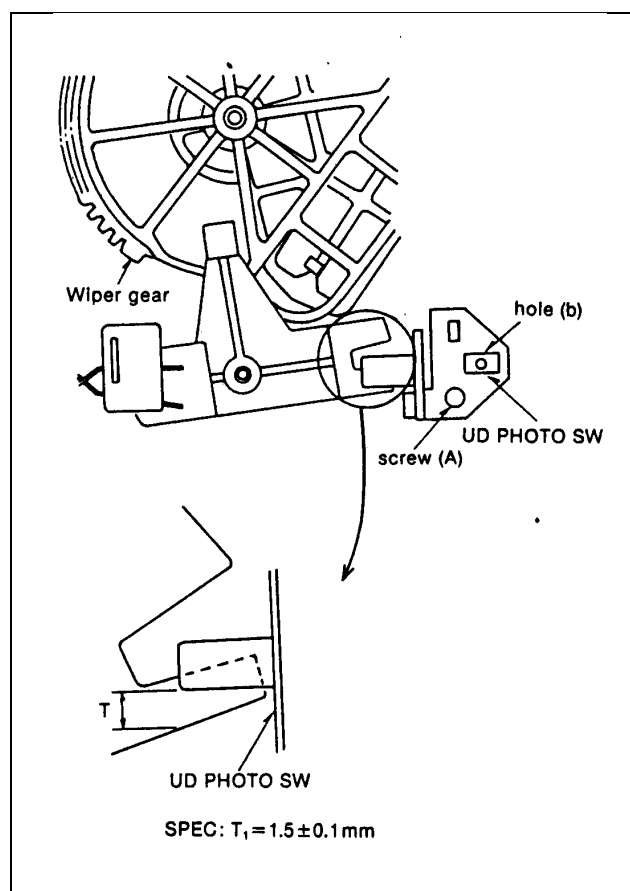
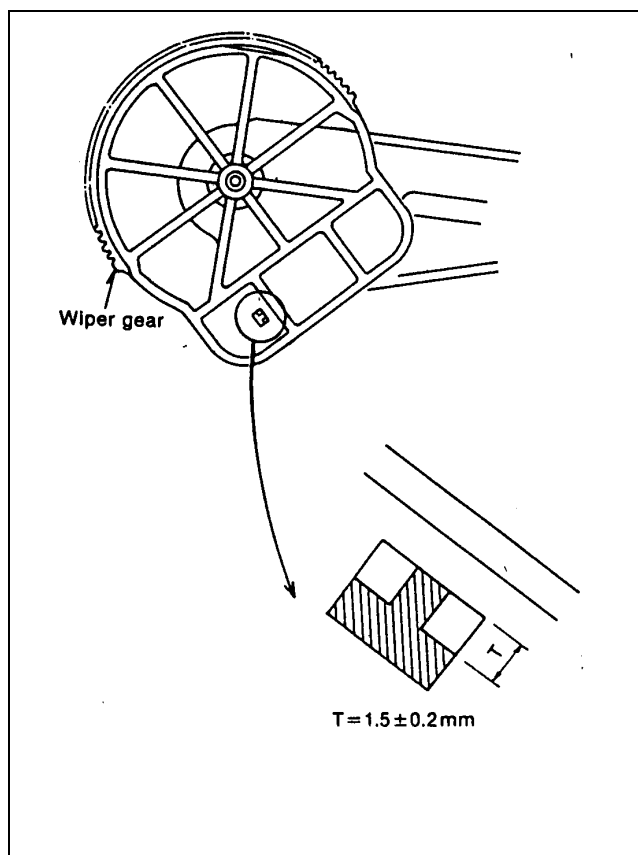
7-32. V Photo SW Adjustment

1. Remove front loading unit.
2. Insert a screwdriver (negative) into the hole (A) and rotate it until cassette holder is in down condition.
3. Loosen 2 screws (A) and insert eccentric screwdriver into the hole (B).
4. Adjust SW position so that the GAP (T) is 0mm - 0.5mm.
5. Tighten 2 screws (A).



7-33. UD Photo SW Adjustment

1. Remove front loading unit.
2. Rotate worm gear clockwise until gap (T) is $1.5\text{mm} \pm 0.2\text{mm}$.
3. Loosen screw (A) and insert eccentric screwdriver into the hole (B).
4. Adjust SW position so that the (T) is $1.5\text{mm} \pm 0.1\text{mm}$.
5. Tighten the screw (A).



SECTION 4

ELECTRICAL ADJUSTMENT

CONTENTS

1. Power Supply (Power Unit & CYL Power)

- 1-1. Power Voltage Adjustment.....EAD-1
- 1-2. Cylinder Power Voltage Adjustment.....EAD-1

2. SERVO (S0 & SERVO CONTROL)

- 2-1. Sub Loading Start SW Adjustment.....EAD-2
- 2-2. Sensor AMP Gain AdjustmentEAD-2
- 2-3. Sensor AMP Offset AdjustmentEAD-3
- 2-4. Supply Sensor Voltage Adjustment.....EAD-3
- 2-5. Loading Torque Offset AdjustmentEAD-3
- 2-6. Supply Tension AdjustmentEAD-4
- 2-7. T FWD Torque Adjustment and
T REV Tension ConfirmationEAD-4
- 2-8. Tape Tension Confirmation.....EAD-5

3. AT (M1)

- 3-1. CTL PB Circuit ConfirmationEAD-6
- 3-2. Group Delay Compensation ConfirmationEAD-6
- 3-3. Drive Waveform Confirmation.....EAD-6
- 3-4. Piezo Height Adjustment.....EAD-7
- 3-5. Strain Sensor Offset Adjustment (1)EAD-7
- 3-6. Strain Sensor Offset Adjustment (2)EAD-8
- 3-7. Strain Sensor Gain Adjustment.....EAD-8
- 3-8. TWT Center Frequency Adjustment.....EAD-9
- 3-9. Strain Loop Frequency Response Adjustment.EAD-9
- 3-10. Group Delay Compensation AdjustmentEAD-10
- 3-11. Envelope ConfirmationEAD-10

4. RF (EQ: S1)

- 4-1. Setting of Measurement Equipment.....EAD-11
- 4-2. Setting to 60I 8ch ModeEAD-12
- 4-3. Initial Setting of PLL Adjustment (60I8 Mode)..... EAD-12
- 4-4. Initial Setting of EQ Adjustment (60I8 Mode).....EAD-12
- 4-5. VCO Drive Voltage Adjustment (60I8 Mode)...EAD-13
- 4-6. BAL Adjustment (60I8 Mode).....EAD-13
- 4-7. EQ Adjustment (60I8 Mode).....EAD-14
- 4-8. PLL Adjustment (60I8 Mode).....EAD-15
- 4-9. Setting to 60I4 ModeEAD-15
- 4-10. Initial Setting of PLL Adjustment (60I4 Mode).....EAD-16
- 4-11. Initial Setting of EQ Adjustment
and INNER Setting (60I4 Mode)EAD-16
- 4-12. PLL 0% Adjustment (60I4 Mode)EAD-17
- 4-13. EQ Adjustment (60I4 Mode).....EAD-17
- 4-14. PLL Adjustment (60I4 Mode)EAD-18
- 4-15. Setting to 24P Mode.....EAD-19

- 4-16. Initial Setting of PLL (24P Mode) Adjustment..... EAD-19
- 4-17. Initial Setting of EQ Adjustment and INNER Setting
(24P Mode) EAD-19
- 4-18. PLL 0% adjustment(24P Mode)..... EAD-20
- 4-19. EQ Adjustment (24P Mode)..... EAD-20
- 4-20. PLL Adjustment (24P Mode)..... EAD-21
- 4-21. Setting to 50I Mode..... EAD-22
- 4-22. Initial Setting of PLL (50I Mode) Adjustment..... EAD-22
- 4-23. Initial Setting of EQ Adjustment and INNER Setting
(50I Mode) EAD-22
- 4-24. PLL 0% adjustment(50I Mode) EAD-23
- 4-25. EQ Adjustment (50I Mode) EAD-23
- 4-26. PLL Adjustment (50I Mode)..... EAD-24
- 4-27. REC Current Adjustment EAD-25
- 4-28. REC Envelope Level EAD-26
- 4-29. Confirmation of Error rate..... EAD-26

5. CUE & TC (S2)

- 5-1. Initial Setting of Test Equipment..... EAD-27
- 5-2. Initial Setting of VTR EAD-27
- 5-3. Monitor Output Balance Adjustment..... EAD-27
- 5-4. CUE Output Balance Adjustment..... EAD-27
- 5-5. CMRR Adjustment EAD-28
- 5-6. D3 PLAYBACK EQUALIZER ADJUSTMENT.. EAD-28
- 5-7. REC Meter Level Adjustment EAD-28
- 5-8. CUE D IN Adjustment EAD-28
- 5-9. D3 Playback Equalizer
Adjustment EAD-29
- 5-10. D5 Playback Equalizer Adjustment..... EAD-29
- 5-11. D3 Playback Output Level Adjustment EAD-29
- 5-12. D5 Playback Output Level Adjustment EAD-29
- 5-13. PB Meter Level Adjustment EAD-29
- 5-14. Master OSC Adjustment EAD-30
- 5-15. Full Erase Current Adjustment..... EAD-30
- 5-16. CUE Erase Current Adjustment..... EAD-30
- 5-17. TC/CTL Erase Current Adjustment..... EAD-30
- 5-18. TC Bias & Signal Current Adjustment..... EAD-31
- 5-19. CUE Bias Current Adjustment EAD-31
- 5-20. REC Current Adjustment EAD-31
- 5-21. REC Equalizer Adjustment EAD-31
- 5-22. CUE REC Current Adjustment..... EAD-32
- 5-23. Monitor Output Level Adjustment EAD-32

6. AUDIO ADDA (S3)

6-1. Initial Setting of Test Equipment	EAD-33
6-2. Initial Setting of VTR	EAD-33
6-3. Output Balance Adjustment	EAD-33
6-4. CMRR Adjustment	EAD-33
6-5. Input Level Adjustment.....	EAD-34
6-6. Output Level Adjustment.....	EAD-34

7. SDI (S4, S5)

7-1. 1.2V (S5) Adjustment	EAD-35
7-2. 1.2V (S4) Adjustment	EAD-35
7-3. Composite Out Level Adjustment (VIDEO OUT 1)	EAD-35
7-4. Composite Offset Sync Level Adjustment 1 (VIDEO OUT 1)	EAD-35
7-5. COMPOSITE SYNC LEVEL ADJUSTMENT ..	EAD-35
7-6. Composite Out DC Level Adjustment (VIDEO OUT 1)	EAD-35
7-7. Composite Frequency Response Adjustment 1.	EAD-35
7-8. Composite Out Level Adjustment (VIDEO OUT 3)	EAD-35
7-9. Composite Offset Sync Level Adjustment 2 (VIDEO OUT 3)	EAD-37
7-10. Composite Out DC Level Adjustment (VIDEO OUT 3)	EAD-37
7-11. Composite Frequency Response Adjustment 2 .	EAD-37
7-12. Composite Offset Sync Level Adjustment 3 (VIDEO OUT 1)	EAD-37
7-13. Composite Offset Sync Level Adjustment 4 (VIDEO OUT 3)	EAD-38

8. D5 RECPB (L1)

8-1. PCON-PLL Range Adjustment(1)	EAD-39
8-2. PCON-PLL Range Adjustment(2)	EAD-39
8-3. SDI IN-PLL Range Adjustment	EAD-39
8-4. Frame Rate Conversion Play PLL Range Adjustment	EAD-39

9. PB PROC (L2)

9-1. NTSC 4fsc Free Run Frequency Adjustment...	EAD-40
9-2. 74MHz(59Hz) Free RunFrequency Adjustment	EAD-40
9-3. 36MHz(59Hz)Phase Adjustment.....	EAD-40
9-4. Connections (1).....	EAD-41
9-5. HD REF OUT Level Adjustment.....	EAD-41
9-6. HD_REF SYS_H Adjustment	EAD-42
9-7. Burst Sampling Phase Adjustment.....	EAD-42
9-8. CF Phase Adjustment (1).....	EAD-43
9-9. CF Phase Adjustment (2).....	EAD-43
9-10. SD REF OUT Adjustment	EAD-43
9-11. Connections (2).....	EAD-44
9-12. SD_REF SYS_SC Adjustment.....	EAD-45
9-13. SD_SYS SYS_SC Adjustment.....	EAD-45
9-14. PAL 4fsc Free Run Frequency Adjustment.....	EAD-45

9-15. 74MHz(50Hz) Free RunFrequency

Adjustment.....	EAD-45
-----------------	--------

9-16. Connections (3)

EAD-46

9-17. PAL Burst Sampling Phase Adjustment.....

EAD-47

9-18. PAL CF Phase Adjustment (1)

EAD-47

9-19. PAL CF Phase Adjustment (2)

EAD-47

9-20. Connections (4)

EAD-48

9-21. SD REF (PAL) SYS H Adjustment

EAD-49

9-22. SD SYS (PAL) SYS SC Adjustment.....

EAD-49

9-23. HD REF SYS H Adjustment

EAD-49

10. LOCATION OF TEST POINTS & CONTROLS

At the beginning

D3 alignment tape is required for several adjustment items in this section.

To use D3 alignment tape, You will need to switch setting on M1 board.

Please refer to following table to set DIP SW.

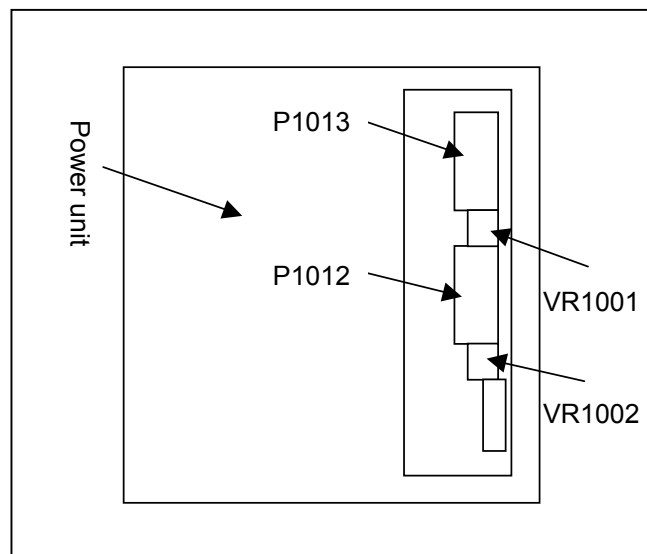
SYSCON software Version	Setting of SW6071-6
In case more than 0.07	OFF
In case less than 0.07	ON

1. Power Supply (Power Unit & CYL Power)

1-1. Power Voltage Adjustment

BOARD	POWER 2
TP	P1013-8(+3.3V), P1012-3(+5.2V)
ADJ	VR1001, VR1002
TAPE	—
INPUT	—
MODE	EJECT
M. EQ	DVM
SPEC.	+3.3V \pm 0.03V (P1013-8/VR1001) +5.1V \pm 0.03V (P1012-3/VR1002)

1. Connect DVM between P1013-8 (+3.3V) and P1013-16 (GND) or between P1012-3 (+5.2) and P1012-9 (GND), and adjust VR1001 and VR1002 voltage so that it is within the specifications.



1-2. Cylinder Power Voltage Adjustment

BOARD	CYL POWER
TP	TP5
ADJ	VR2
TAPE	—
INPUT	—
MODE	EJECT
M. EQ	DVM
SPEC.	10.0 \pm 0.2V

1. Connect DVM between TP5 and TPG1 and adjust VR2 voltage so that it is within the specification.

2. SERVO (S0 & SERVO CONTROL)

Set system format to 525I/59.94 mode.

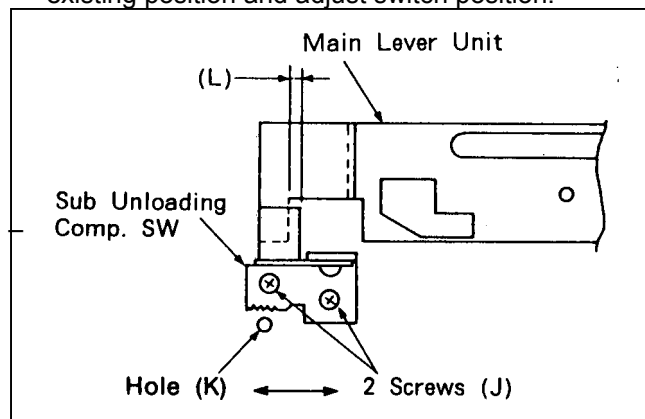
2-1. Sub Loading Start SW Adjustment

BOARD	DRIVE(S0)
TP	P2002-25A (S0)
ADJ.	SUB LOADING START SW
TAPE	—
INPUT	—
MODE	See below
M.EQ	Oscilloscope
SPEC.	1V - 4V

1. Remove front loading unit and turn sub loading motor in loading direction by hand until P2 and P3 arms separate.
2. From above indicated position, turn sub loading motor in unloading direction. Keep turning motor 1.5 - 1.75 turns (1.5 turns + 90°) after P2 and P3 arms contact.
3. Under these conditions, confirm that P2002-25A voltage is 1V - 4V.
4. If the voltage is not within the specification, loosen two screws (J) shown in the figure and insert a fine adjustment screwdriver into hole (K).
5. Move Detection Switch so that the voltage is within the specification.
6. Tighten two screws (J) after adjustment is completed.
7. Install front loading unit and top panel.

NOTE:

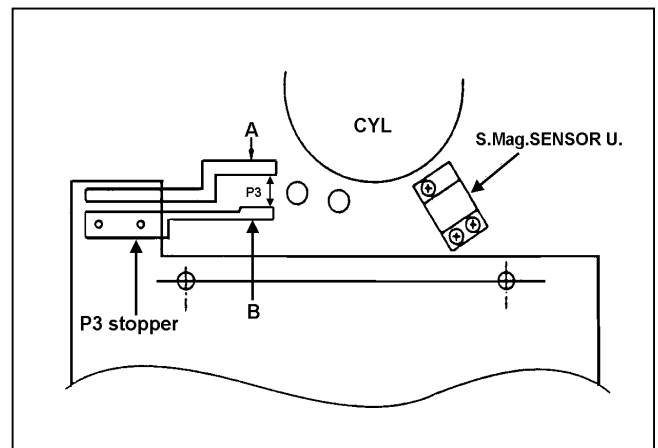
During the last 0.25 turn DC voltage will rise sharply. First turn motor 1.5 turns + 45° and adjust switch position so that the DC voltage is 2.5V. If this voltage is not obtainable, adjust switch position so that the voltage is 1V - 4V. If this is not possible, turn sub loading motor a further $\pm 45^\circ$ from its existing position and adjust switch position.



2-2. Sensor AMP Gain Adjustment

BOARD	SERVO CONTROL
TP	TP2
ADJ.	VR1
TOOL	VFK0719(Mech. Neutral Plate) VFK0924(P3 Stopper)
INPUT	—
MODE	See below
M.EQ	DVM
SPEC.	1.4V \pm 0.1V

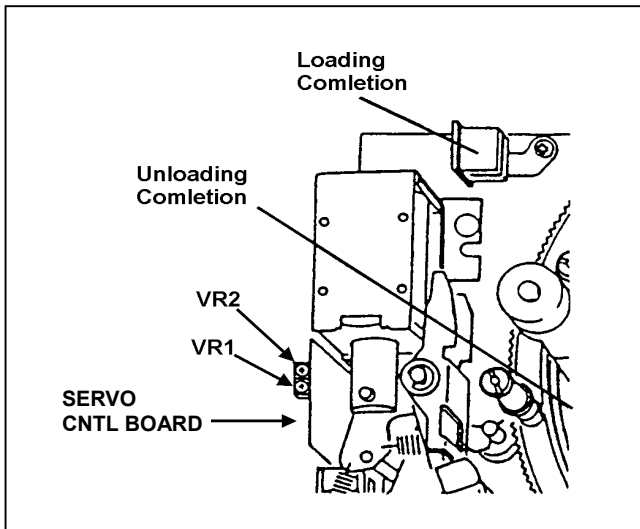
1. Remove front loading unit and set Mech. Neutral Adjustment Plate.
2. In the Sub Loading Completion mode, install P3 Stopper.
3. Adjust VR1 so that voltage difference becomes 1.4V \pm 0.1V between the position where P3 post contacts mechanical neutral adjustment plate (position A) and the position where P3 post contacts P3 Stopper tool (position B).
4. After adjustment is completed, move P3 post as close as possible to cylinder and confirm that the voltage is more than 3.1V with the post in that position.
5. If the voltage is less than 3.1V, re-adjust VR1 so that voltage difference between position A and B is 1.5V.



2-3. Sensor AMP Offset Adjustment

BOARD	SERVO CONTROL
TP	TP2
ADJ.	VR2
TAPE	—
INPUT	—
MODE	EJECT
M.EQ	DVM
SPEC.	$2.5V \pm 0.01V$

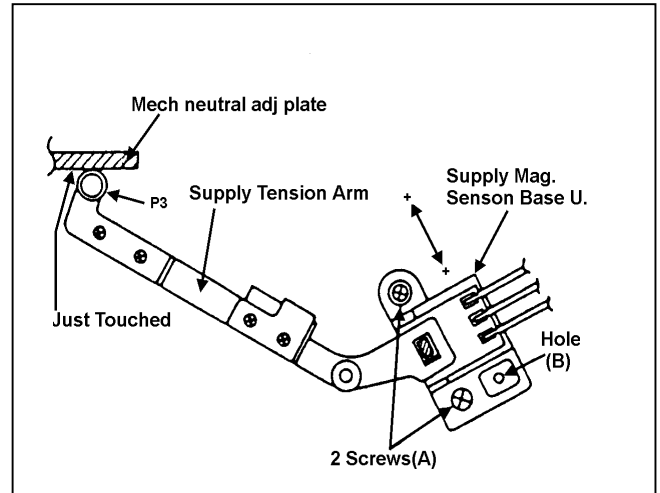
1. Adjust VR2 so that TP2 level is $2.5V \pm 0.01V$ in EJECT position.



2-4. Supply Sensor Voltage Adjustment

BOARD	SERVO CONTROL
TP	TP2
ADJ.	Supply magnet sensor base unit.
TAPE	—
INPUT	—
MODE	EJECT
M.EQ	DVM
SPEC.	$2.5V \pm 0.05V$

1. Remove front loading unit and Mech. Neutral Adjustment Plate.
2. Turn sub loading motor by hand to the loading completion position.
3. Confirm that P3 post touches arm of Mech. Neutral Plate and that voltage at TP2 is $2.5 \pm 0.05V$
4. If it is not, loosen two screws (A) and insert eccentric screwdriver ($\phi 2-\phi 4$) into hole (B). Then adjust sensor base unit position so that TP2 voltage is $2.5V \pm 0.05V$.



2-5. Loading Torque Offset Adjustment

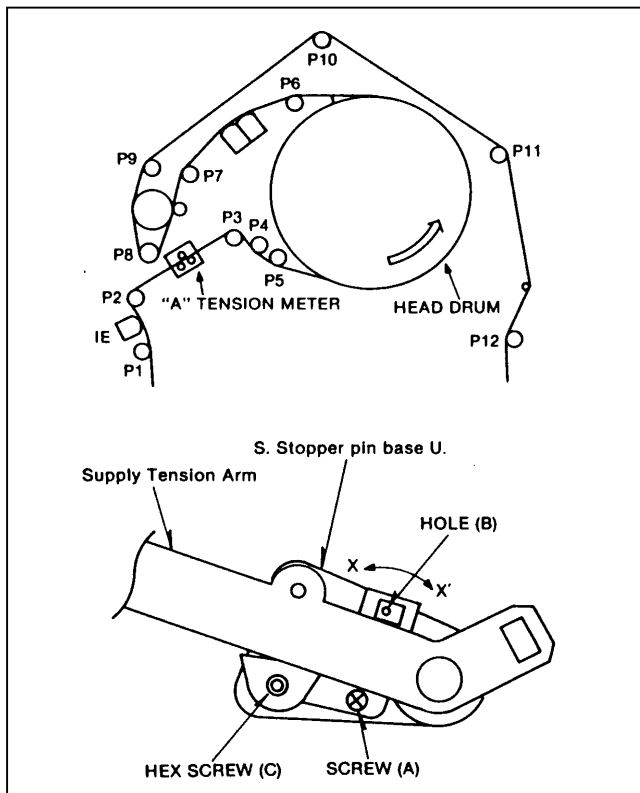
BOARD	—
TP	T Reel
ADJ.	ADJUST VR
TAPE	—
INPUT	—
MODE	—
M.EQ	Torque gauge
SPEC.	$62cN \cdot m \pm 2cN \cdot m$ ($62gf \cdot cm \pm 28gf \cdot cm$)

1. Remove front loading unit.
2. Press **TEST** key to open TEST menu.
3. Press **F7** (SERVO) key to open TEST SERVO menu.
4. Press **F1** (TORQUE) key and **F13** (ADJ ENABLE) key at the simultaneously.
5. Select LOADING with cursor key and then press **F3** (MEASURE) key to set LOADING.
6. Put Torque Gauge in Take Up Reel and then press STOP key.
7. Change loading torque by turning ADJUST VR until loading torque is within the specification.
8. After loading torque is adjusted, and with dial torque gauge still mounted on take-up reel, turn torque gauge by hand until it reads approximately $80cN$ ($80gf \cdot cm$). Release the gauge and record gauge reading when it stops turning.
9. Repeat step 8 three times and then complete adjustment by confirming that the average of the three readings value is within the specification.
10. Press **F3** key and turn power off.

2-6. Supply Tension Adjustment

BARD	—
TP	Between P2 and P3
ADJ.	Stopper pin base unit
TAPE	Beginning of Blank Tape (D5 48min M size)
INPUT	—
MODE	—
M.EQ	VFK0132A(Tension meter) VFK0357(Eccentric screwdriver (Φ 1.5))
SPEC.	23±2cNm (23gf±2gf)

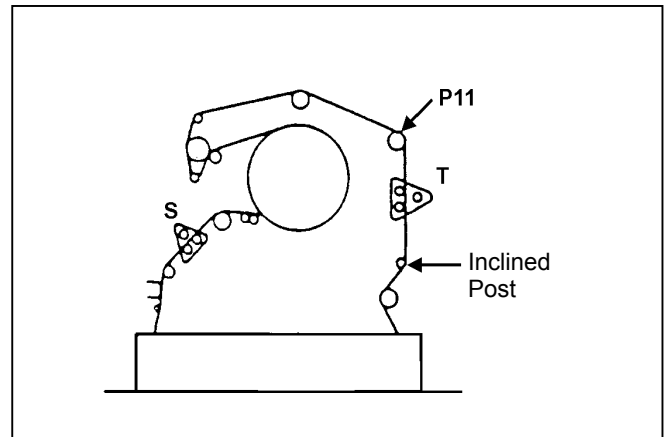
1. Remove front loading unit.
2. Press **TEST** key to open TEST menu.
3. Press **F4** key to open TEST MECHA menu.
4. Press **F1** (MODE) key and set "NO FRLD."
5. Press **F3** (C.SIZE) key and set "M."
6. Insert an M-size cassette that has been fully rewound and then Press STOP button.
7. Adjust the position (refer to the figure below) by loosening screw (A). Then insert eccentric screwdriver into hole (B) and adjust the position of S. Stopper Pin Base Unit so that tape tension is $23\text{cN} \pm 5\text{cN}$. After coarse adjustment, tighten screw (A) to a torque of $0.6\text{cN.m} - 0.8\text{cN.m}$ (6kgcm - 8kgcm). Then turn set screw (C) and adjust tension to $23\text{cN} \pm 2\text{cN}$.
8. After completing the adjustment, apply lock-tight to the screws.



2-7. T FWD Torque Adjustment and T REV Tension Confirmation

BOARD	—
TP	Between P11 and inclined post
ADJ.	T-REEL FWD Value(TEST SERVO MENU)
TAPE	Beginning of Blank Tape (D5 48min M size)
INPUT	—
MODE	REC/PLAY, REV X1(VAR)
M.EQ	VFK0132(Tension meter)
SPEC.	30±5cNm(30gf±5gf)

1. Press **TEST** key to open TEST menu.
2. Press **F7** (SERVO) key to open TEST SERVO menu.
3. Press **F1** (TORQUE) key and **F13** (ADJ ENABLE) key simultaneously.
4. Select T-REEL FWD by cursor key.
5. In REC/PLAY mode, insert Tentro meter between P11 and the inclined post.
6. Adjust T-tension with ADJUST VR until meter reading is within the specification.
7. In REV x 1 (VAR) mode, insert Tentro meter between P11 and inclined post.
8. Confirm that T-tension is within the specification.



2-8. Tape Tension Confirmation

BOARD	—
TP	Between P2 and P3 and between P11 and P12
ADJ.	—
TAPE	D5 Blank tape
INPUT	—
MODE	SHTL × 32、 × -32
M.EQ	VFK0132(Tension meter)
SPEC	See table below

1. Insert a blank tape.
2. Insert tension meter between P2 and P3 post and confirm supply side tensions is within the specification as shown below in SHTL × 32 mode and SHTL × -32 mode
3. Insert tension meter between P11 and P12 post and confirm take up tensions is within the specification as shown below in the SHTL × 32 mode and SHTL × -32 mode.

	Supply side	Take-up side
SHTL 32	23±10cN (23gf±10gf)	45(+15/−20)cN 45gf(+15gf/−20gf)
SHTL -32	45±15cN (45gf±15gf)	20(+147/−196)cN 20gf(+15gf/−20gf)

3. AT(M1)

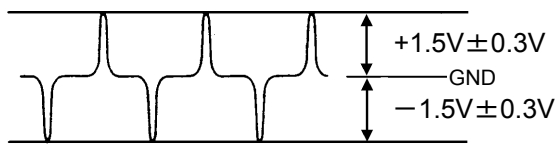
Set system format to 525I/59.94 mode.

3-1. CTL PB Circuit Confirmation

BOARD	SYS/SRV (M1)
TP	TP2305
ADJ.	—
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	$1.5V \pm 0.3V$, $-1.5V \pm 0.3V$

1. Disconnect connector P523 on CYL POWER P.C. Board.
2. Set DIP SW2001 on M1 P.C. Board as follows.
 - 1: ON (SEARCH : CENTER)
 - 2: OFF (PATTERN : ENABLE)
 - 3: ON (STRNLOOP : OPEN)
 - 4: ON (HIGH VOLTAGE : OFF)
3. Confirm that CTL signal level is within the specification, when playing the color bar portion of D5 alignment tape.

TP2305

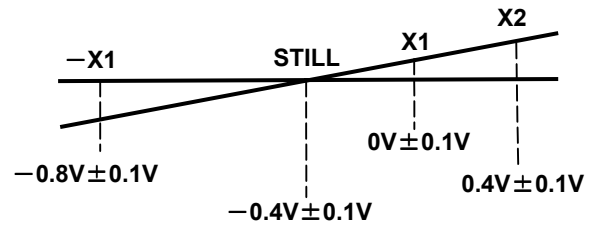


3-2. Group Delay Compensation Confirmation

BOARD	SYS/SRV (M1)
TP	TP2811
ADJ.	—
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	STILL, -X1, X1, X2 (SHTL Mode)
M.EQ.	Oscilloscope
SPEC.	See figure below

1. Disconnect connector P523 on CYL POWER P.C. Board.
2. Set DIP SW2001 on M1 P.C. Board as follows.
 - 1: ON (SEARCH : CENTER)
 - 2: OFF (PATTERN : ENABLE)
 - 3: ON (STRNLOOP : OPEN)
 - 4: OFF (HIGH VOLTAGE : ON)
3. Play D5 Alignment tape in SHTL mode speed indicated above table and confirm that TP2811 DC level is as shown in the figure at each SHTL speed.

TP2811

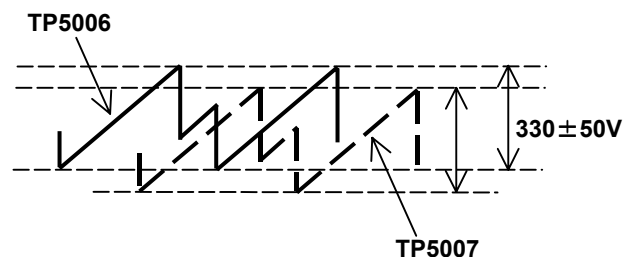


3-3. Drive Waveform Confirmation

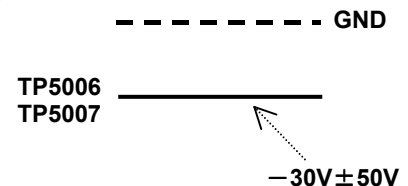
BOARD	CYL POWER
TP	TP5006, TP5007
ADJ.	—
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY, VARX2
M.EQ.	Oscilloscope
SPEC.	See figure below

1. Disconnect connector P523 on CYL POWER P.C. Board.
2. Set DIP SW2001 on M1 P.C. Board as follows.
 - 1: ON (SEARCH : CENTER)
 - 2: OFF (PATTERN : ENABLE)
 - 3: ON (STRNLOOP : OPEN)
 - 4: OFF (HIGH VOLTAGE : ON)
3. Confirm that drive waveform at TP5006 and TP5007 is as shown in the figure in Play mode and VARX2 mode.
4. Connect connector P523 on CYL POWER P.C. Board.

(VAR X2 mode)



(PLAY mode)



3-4. Piezo Height Adjustment

BOARD	CYL POWER
TP	TP5006, TP5007
ADJ.	NATURAL POS (TEST SERVO Menu)
TAPE	D5 Alignment tape No.4(VFM5080JR)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	See below

- Set DIP SW2001 on M1 P.C. Board as follows.
 - ON (SEARCH : CENTER)
 - OFF (PATTERN : ENABLE)
 - ON (STRNLOOP : OPEN)
 - OFF (HIGH VOLTAGE : ON)
- Set service switch (on the back of front panel) to ON.
- Press **TEST** and **F7** (SERVO) key to open TEST SERVO menu.
- Press **F13** (ADJ ENABLE) key and **F4** (AT) key simultaneously. The cursor will appear in AT display.
- Using **↓** key, move cursor to ACH and BCH in item "NATURAL POS".
- Press **F5** (METER) key and select ENV to display envelope level.
 - Envelope level is maximum on Envelope bar graph of Ach and Bch on the front panel.
 - D2003 (SEG LED) goes out.
 - The voltage at TP5006 and TP5007 are $-30V \pm 50V$.

NOTE: Be sure Tracking FIX mode.

- After adjustment completed, set service switch to OFF.

3-5. Strain Sensor Offset Adjustment (1)

BOARD	SYS/SRV (M1)
TP	TP2807, TP2817
ADJ.	STRN DC OS (TEST SERVO Menu)
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	Oscilloscope
SPEC.	$0V \pm 50mV$

- Set DIP SW2001 on M1 P.C. Board as follows.
 - ON (SEARCH : CENTER)
 - OFF (PATTERN : ENABLE)
 - ON (STRNLOOP : OPEN)
 - OFF (HIGH VOLTAGE : ON)
- Set service switch (on the back of the front panel) to ON.
- Press **TEST** and **F7** (SERVO) key to open TEST SERVO menu.
- Press **F13** (ADJ ENABLE) key and **F4** (AT) key simultaneously. The cursor will appear in AT display.
- Using **↓** key, move cursor to ACH and BCH in item "STRN DC OS".
- Adjust the ACH and BCH values of "STRN DC OS" so that the voltage at TP2807 and TP2817 is $0V \pm 50mV$.
- After adjustment completed, set service switch to OFF.

3-6. Strain Sensor Offset Adjustment (2)

BOARD	CYL POWER
TP	TP5006, TP5007
ADJ.	STRN DC OS (TEST SERVO Menu)
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	See below

- Set DIP SW2001 on M1 P.C. Board as follows.
 - ON (SEARCH : CENTER)
 - OFF (PATTERN : ENABLE)
 - OFF (STRNLOOP : CLOSE)
 - OFF (HIGH VOLTAGE : ON)
 - Set service switch (on the back of the front panel) to ON
 - Press **TEST** and **F7** (SERVO) key to open TEST SERVO menu.
 - Press **F13** (ADJ ENABLE) key and **F4** (AT) key simultaneously. The cursor will appear in AT display.
 - Using **↓** key, move cursor to ACH and BCH in item "STRN DC OS".
 - Press **F5** (METER) key and select ENV to display envelope level.
 - Playback D5 alignment tape and adjust value of "STRN DC OS" by ADJUST VR so that the condition meets followings.
 - Envelope level is maximum on Envelope bar graph of Ach and Bch on the front panel.
 - D2003 (SEG LED) goes out.
 - The voltage at TP5006 and TP5007 are $-30V \pm 50V$.
- NOTE:** Be sure Tracking FIX mode.
- After adjustment completed, set service switch to OFF.

3-7. Strain Sensor Gain Adjustment

BOARD	CYL POWER
TP	TP5006, TP5007
ADJ.	STRN GAIN (TEST SERVO Menu)
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	See below

- Set DIP SW2001 on M1 P.C. Board as follows.
 - ON (SEARCH : CENTER)
 - OFF (PATTERN : ENABLE)
 - OFF (STRNLOOP : CLOSE)
 - OFF (HIGH VOLTAGE : ON)
- Press **VIDEO OUT** and **F8** (SET UP) key to open VIDEO OUT SETUP menu.
- Press **F12** (STATE) key to display the STATE.
- Press cursor center key to display cursor.
- Move cursor to EDIT REC using **→** key. Press cursor center key and select TAPE in EDIT REC.
- Press **HOME** key and return to HOME menu.
- Press **ASSEMBLE** and **F8** (SET UP) key to open AUTO EDIT SETUP menu.
- Press **F13** (MODE) and set MODE to CUT. Press **F8** (EXIT) and **F9** (ASSEMBLE) key to set confidence Playback mode.
- Set service switch (on the back of front panel) to ON
- Press **TEST** and **F7** (SERVO) key to open TEST SERVO menu.
- Press **F13** (ADJ ENABLE) key and **F4** (AT) key simultaneously. The cursor will appear in AT display.
- Using **↓** key, move cursor to ACH and BCH in item "STRN GAIN".
- Press **F5** (METER) key and select ENV to display envelope level.
- Playback D5 alignment tape and adjust value of "STRN GAIN" by ADJUST VR so that the condition meets followings.
 - Envelope level is maximum on Envelope bar graph of Ach and Bch on the front panel.
 - D2003 (SEG LED) goes out.
 - The voltage at TP5006 and TP5007 are $195V \pm 70V$.

NOTE: Be sure Tracking FIX mode.

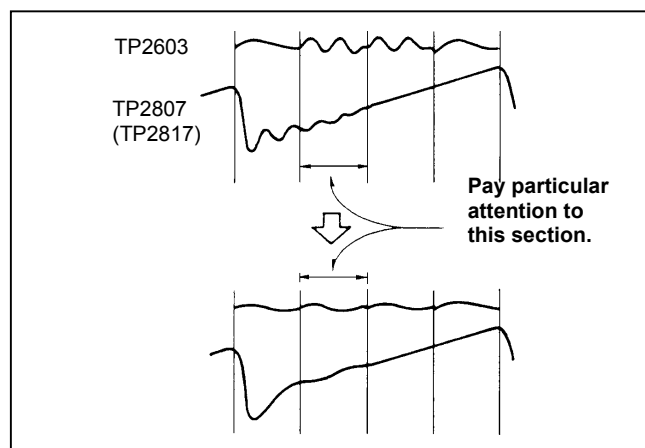
- After adjustment completed, set service switch to OFF.

3-8. TWT Center Frequency Adjustment

BOARD	SYS/SRV (M1)
TP	TP2603, TP2807, TP2817
ADJ.	DRIVE GAIN, GROUP DELAY RESONANCE (TEST SERVO Menu)
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	VAR × 2
M.EQ.	Oscilloscope
SPEC.	—

CAUTION: Do not execute this adjustment if the waveform at TP2603 is practically flat (see figure below).

- Set DIP SW2001 on M1 P.C. Board as follows.
 - ON (SEARCH : CENTER)
 - OFF (PATTERN : ENABLE)
 - OFF (STRNLOOP : CLOSE)
 - OFF (HIGH VOLTAGE : ON)
- Set service switch (on the back of the front panel) to ON.
- Press **TEST** and **F7** (SERVO) key to open TEST SERVO menu.
- Press **F13** (ADJ ENABLE) key and **F4** (AT) key simultaneously. The cursor will appear in AT display.
- Using **↓** key, move cursor to ACH and BCH in item "DRIVE GAIN".
- Playback D5 alignment tape in VARX2 mode and set the ACH and BCH values of "DRIVE GAIN" to 255.
- In VARX2 mode, adjust the ACH and BCH values so that tape is on-track (increase the signal level if it is low).
- Using **↑** key, move cursor to ACH and BCH in the item "RESONANCE". Adjust the ACH and BCH values so that the undulations (vibrating components) of their respective waveforms are minimized.
- Make sure D2003 (SEG LED) goes out and then reset the ACH and BCH values to 0.
- Set service switch to off.

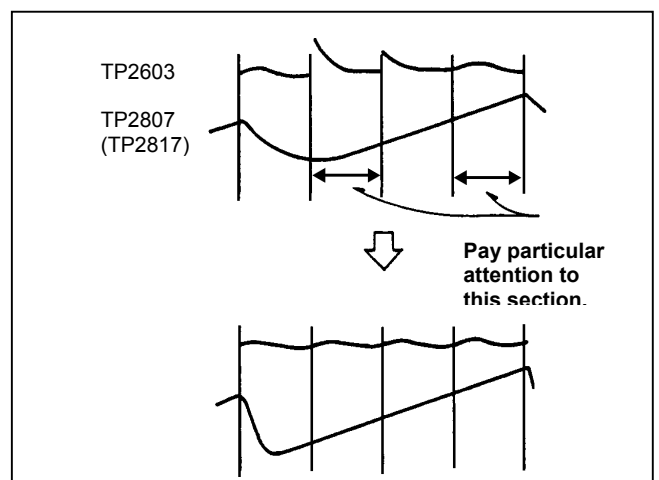


3-9. Strain Loop Frequency Response Adjustment

BOARD	SYS/SRV (M1)
TP	TP2603, TP2807, TP2817
ADJ.	DRIVE GAIN, GROUP DELAY (TEST SERVO Menu)
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	VAR × 2
M.EQ.	Oscilloscope
SPEC.	—

CAUTION: Do not execute this adjustment if the waveform at TP2603 is practically flat (see figure below).

- Set DIP SW2001 on M1 P.C. Board as follows.
 - ON (SEARCH : CENTER)
 - OFF (PATTERN : ENABLE)
 - OFF (STRNLOOP : CLOSE)
 - OFF (HIGH VOLTAGE : ON)
- Set service switch (on the back of the front panel) to ON.
- Press **TEST** and **F7** (SERVO) key to open TEST SERVO menu.
- Press **F13** (ADJ ENABLE) key and **F4** (AT) key simultaneously. The cursor will appear in AT display.
- Using **↓** key, move cursor to ACH and BCH in item "GROUP DELAY".
- Playback D5 alignment tape in VARX2 mode and adjust the ACH and BCH values of "GROUP DELAY" so that tape is on-track.
- Using **↓** key, move cursor to ACH and BCH in item "DRIVE GAIN".
- Adjust the ACH and BCH values of "DRIVE GAIN" so that sags and bends at entrance side of TP2603 waveform are minimized.
- Make sure there is no overshooting of waveforms at TP2807 and TP2817 at this time and that D2003 (SEG LED) goes out.
- Set service switch to off.



3-10.Group Delay Compensation Adjustment

BOARD	SYS/SRV (M1)
TP	TP402, WFM OUT Front Panel : Envelope Graph
ADJ.	STRN DC OS, STRN GAIN GROUP DELAY (TEST SERVO Menu)
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY, VAR \times 0.03, VAR \times -1 \sim \times 2
M.EQ.	Oscilloscope
SPEC.	—

CAUTION: Be sure to execute this adjustment after completing the adjustments described in item. "3-5, Strain Gauge Offset Adjustment (1)," and "3-6, Strain Gauge Offset Adjustment (2)."

- Set DIP SW2001 on M1 P.C. Board as follows.
 - ON (SEARCH : CENTER)
 - OFF (PATTERN : ENABLE)
 - OFF (STRNLOOP : CLOSE)
 - OFF (HIGH VOLTAGE : ON)
- Set service switch (on the back of the front panel) to ON.
- Press **TEST** and **F7** (SERVO) key to open TEST SERVO menu.
- Press **F13** (ADJ ENABLE) key and **F4** (AT) key simultaneously. The cursor will appear in AT display.
- Using **↓** key, move cursor to ACH and BCH in item "STRN DC OS".
- Press **F5** (METER) key and select ENV to display envelope level.
- Playback D5 alignment tape and adjust value of "STRN DC OS" by ADJUST VR so that the condition meets followings.
 - Envelope level is maximum on Envelope bar graph of Ach and Bch on the front panel.
 - D2003 (SEG LED) goes out.
 - The voltage at TP5006 and TP5007 are $-30V \pm 50V$.

NOTE: Be sure Tracking FIX mode.

- Using **↓** key, move cursor to ACH and BCH in item "STRN GAIN".
- Playback D5 alignment tape in VAR \times 0.03 mode.
- Adjust the "STRN GAIN" so that vibrations (changes) in envelope level on the front panel display are minimized.
- Using **↓** key, move cursor to ACH and BCH in item "GROUP DELAY".
- Playback D5 alignment tape and adjust the ACH and BCH values of "GROUP DELAY" so that envelope level at the TP402 and the front panel display becomes maximum and stay at that level when the VTR mode is repeatedly changed from VARX-1 to X2.

- Confirm envelope level of the WFM OUT (CH1 - CH3).
- Make sure D2003 (SEG) goes out.
- Set service switch to off.

3-11. Envelope Confirmation

BOARD	—
TP	WFM OUT(CH0~CH3)
ADJ.	—
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY, PREREAD PLAY, CONF PLAY VAR \times -1 \sim \times 2
M.EQ.	Oscilloscope
SPEC.	—

- Set all bit of DIP SW2001 to OFF position.
- Confirm that envelope level is within the specifications in each modes indicated in the table.
- Make sure D2003 (SED LED) goes out in each mode indicated in the table.

MODE	ENV (CH0~CH3)
NORMAL PLAY PREREAD PLAY CONFIDENCE PLAY	$\max \geq 70\%$
VAR \times -1 \sim \times 2	$\max \geq 60\%$

[How to set confidence playback mode]

- Press **VIDEO OUT** and **F8** (SET UP) key to open VIDEO OUT SETUP menu.
- Press **F12** (STATE) key to display STATE.
- Press cursor center key to display cursor.
- Move cursor to EDIT REC using **→** key. Press cursor center key and select TAPE in EDIT REC.

[How to set preread playback mode]

- Press **INSERT** button to open AUTO EDIT menu.
- Press **F9** (INSERT) key and set to ON.
- Press **VIDEO OUT** and **F8** (SET UP) key to open VIDEO OUT SETUP menu.
- Press cursor center key to display cursor.
- Move cursor to EDIT REC using **→** key. Press cursor center key and select EE1 in EDIT REC.

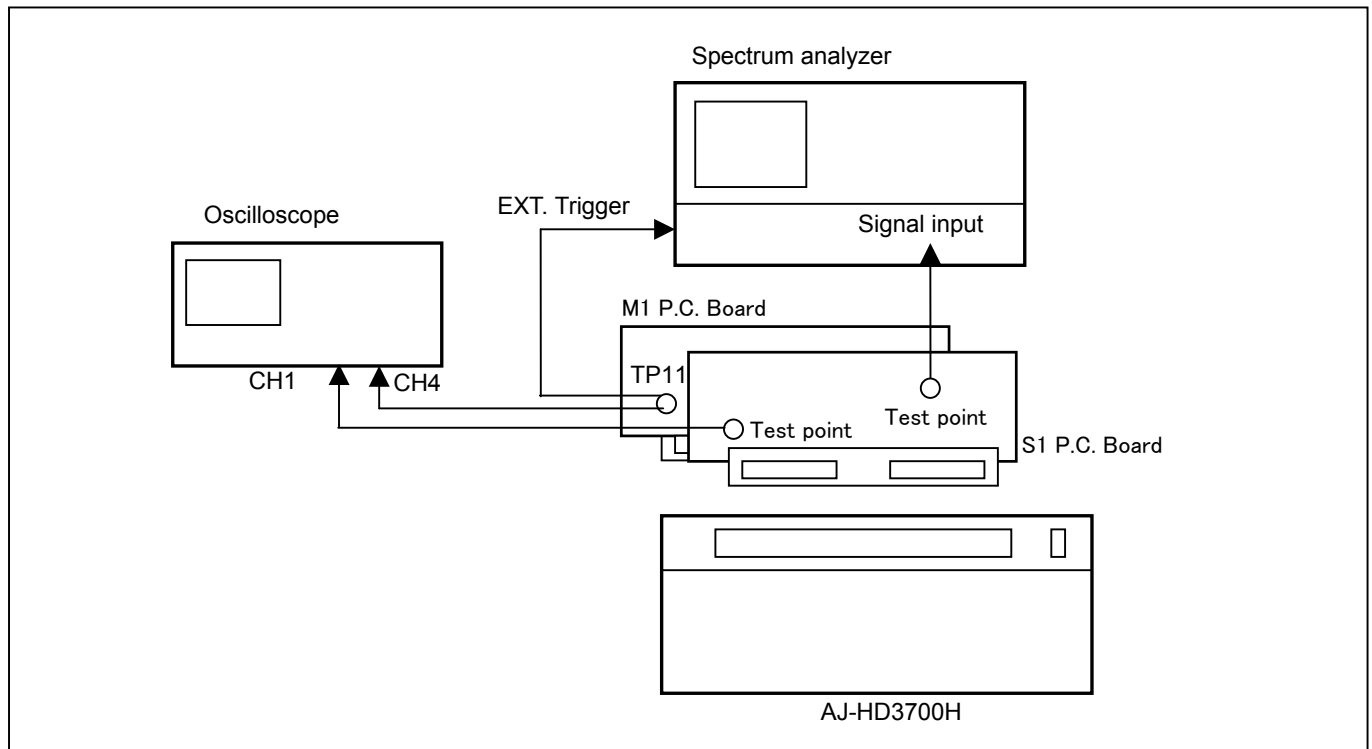
4. RF (EQ: S1)

RF adjustment needs to be performed in 59.94I/4ch, 59.94I/8ch, 23.98p and, 50I mode.

On TEST RF menu, format is displayed as “**60I8**” for 1080/59.94 8ch, as “**60I4**”, for 1080/59.94, 4ch as “**24P**” for 1080/23.98 8ch and as “**50I**” for 1080/50I.

Set Service switch (bit 1 of DIP SW 1 on front bottom side) to ON position to be in Service mode before doing adjustment described in this RF section.

<Connection>



4-1. Setting of Measurement Equipment

<Spectrum analyzer setting>

Item	Setting
RES BW	1MHz
VIDEO BW	3KHz
SWEEP TIME	300msec
REFERENCE LEVEL	- 12dBm
dB/DIV	LOG 5dB/DIV
START FREQ.	0MHz
STOP FREQ.	50MHz
ATTENETOR	10dB
TRIG	EXT

<Oscilloscope setting>

Item	Setting
CH1 10:1 PROBE	DC 0.1V/DIV
CH4 10:1 PROBE	DC 5V/DIV
SWEEP	2msec/DIV
TRIG	CH4
LPF(20MHz)	ON
CHOP	ON

4-2. Setting to 60I 8ch Mode

NOTE:

This setting doesn't work in tape loading condition.
Confirm that VTR is in eject mode. If tape is loaded, eject the tape,

1. Open SET UP menu and press **[F4]** (SYSTEM) key to open SYSTEM SET UP menu.
2. Set SYSTEM to 59.94I/8ch mode on SYSTEM SET UP menu.
3. Open "TEST RF" menu by pressing **[TEST]** key and then **[F2]** (RF) key.
4. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
5. Press **[F11]** (ADJ RF) key to display table and press **[F]** and **[F12]** (ADJ SEL) key simultaneously to select the table of 60I8.

4-3. Initial Setting of PLL Adjustment (60I8 Mode)

1. Open "TEST RF" menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 60I8 and then the 60I8PLL table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 60I8PLL by pressing **[F]** and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With ADJUST VR, set adjustment values displayed to the initial settings follow as shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR, as well as CH0 setting.

ADJ RF 60I8 PLL		
CH0/1/2/3	+	—
0	+80	0
5	+180	-20
10	+280	-133
15	+396	-244

4-4. Initial Setting of EQ Adjustment (60I8 Mode)

1. Open "TEST RF " menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 60I8EQ and then the 60I8EQ table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 60I8EQ by pressing **[F]** key and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With the ADJUST VR, set adjustment values displayed to the initial settings shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR, as well as CH0 setting.

ADJ RF 60I8EQ		
CH0/1/2/3	A	B
GAIN	0	0
M FREQ	-20	-20
H FREQ	-70	-70
PHASE	-30	-30
CK TMG	0	0

4-5. VCO Drive Voltage Adjustment (60I8 Mode)

BOARD	EQ (S1)
TP	REF TP: TP204, TP404, TP604, TP804 ADJ TP: TP202, TP402, TP602, TP802
ADJ.	L226 (TP202), L426 (TP402) L626 (TP602), L826 (TP802)
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	DVM
SPEC.	Voltage at ADJ TP=Voltage at REF TP $0 \pm 0.1V$

1. Play alignment tape and adjust L226 trimmer core so that voltage at TP202 is within $\pm 0.1V$ to voltage at TP204.
2. By same procedure in step 1, adjust each trimmer core (L426, 626, 826) so that the corresponding TP voltage (TP402, 602, 802) is within the specification.

NOTE:

If TP voltage does not change when the corresponding trimmer core is adjusted, change the CK TMG of 60I8 EQ CH0 to link TP voltage change to trimmer core adjustment. Adjusting L426, change CK TMG of CH1. Adjusting L626, change CK TMG of CH2. Adjusting L826, change CK TMG of CH3.

4-6. BAL Adjustment (60I8 Mode)

BOARD	EQ (S1)
TP	Front panel error rate display (INNER ERROR CH0 - CH3 A/B)
ADJ.	VR201 (CH0), VR401 (CH1) VR601 (CH2), VR801 (CH3)
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	—
SPEC.	Minimum error rate

1. Press cursor center key to display the cursor.
2. Press **[F]** and **[→]** keys simultaneously to move cursor to display of "CONCEAL V" on bottom-left side of Front Panel Display.
3. Move cursor to display of "INNER" by pressing **[→]** key.
4. Press cursor center key to set "INNER" to OFF.
5. Play HDD5 color bar alignment tape and adjust VR201 so that the error rate of INNER ERROR CH0 A/B is minimum.
6. Adjust VR so that error rate is minimum to each channel 1, 2 and 3 by following same procedure as in step 5. VR401 is for CH1 A/B, VR601 is for CH2 and VR801 is for CH3.

4-7. EQ Adjustment (60I8 Mode)

BOARD	EQ (S1)
TP	Front panel error rate display (INNER ERROR CH0 - CH3 A/B) CH0 EYE: TP203 CH1 EYE: TP403 CH2 EYE: TP603 CH3 EYE: TP803
ADJ.	GAIN, CK TMG, H FREQ, M FREQ, PHASE (60I8 EQ: TEST RF Menu)
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	—
SPEC.	Minimum error rate

- Open "TEST RF " menu by pressing **[TEST]** key and then **[F2]** (RF) key.
- Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
- Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 60I8EQ and then the 60I8EQ table is displayed.
- Press **[F6]** (ADJ MODE) key to set "MANUAL".
- Press **[F7]** (ADJ CH) key to set "CH0".
- Play HDD5 color bar alignment tape.
- Press cursor center key to display cursor.
- Move cursor to "CK TMG".
- Adjust value of "CK TMG" so INNER ERROR RATE of CH0 A and B are minimum.
- Move cursor to "PHASE" of CH0 A with **[F]** key and **[→]** key, and adjust CH0 A "PHASE" value so that INNER ERROR rate is minimum.
- Move cursor to "PHASE" of CH0 B and adjust CH0 B "PHASE" value so that INNER ERROR rate is minimum.
- Connect spectrum analyzer to TP203(CH0 EYE) and adjust value of CH0 A/B "H FREQ" so that levels at 5MHz and 38MHz are same level.
NOTE: Connect TP403 for CH1, TP603 for CH2, TP803 for CH3.
- Move cursor to CH0 A "M FREQ" with **[F]** key and **[→]** key, and adjust CH0 A "M FREQ" value so that INNER ERROR rate is minimum.
- Move cursor to CH0 B "M FREQ" and adjust the CH0 B "M FREQ" value so that INNER ERROR rate is minimum.
- Move cursor to CH0 A "H FREQ" with **[F]** key and **[→]** key, and adjust CH0 A "H FREQ" value so that INNER ERROR rate is minimum.
- Move cursor to CH0 B "H FREQ" and adjust CH0 B "H FREQ" value so that INNER ERROR rate is

minimum.

- Select CH1 - 3 with **[F7]** (ADJ CH) key and adjust value of PHASE, H FREQ and M FREQ so that Inner Error rate is minimum by following the steps 5 to 16 of the procedure for CH0.

NOTE:

If error rate is out of the specification, adjust H FREQ so that the error rate is minimum after shifting the value of M FREQ by +10. If this result is better than error rate before shifting the M FREQ, adjust H FREQ after shifting the M FREQ more by +10. If the result is not better than error rate before shifting the M FREQ, readjust H FREQ after shifting the M FREQ by -10. Search the best adjusting point by repeating this procedure. After repeating this adjustment, readjust CK TMG adjustment and PHASE adjustment.

- Press **[F2]** (METER) key and change display from ERROR to ENV (from ERROR RATE level meter to ENVELOPE level meter).
- Move cursor to "GAIN" A.
- Adjust CH0 A "GAIN" value so that scale on the side of the ENVELOPE level meter reads "3 ± 0.2."
- Select CH0 - 3 **[F7]** (ADJ CH) key and adjust CH0 - CH3 A,B "GAIN."

4-8. PLL Adjustment (60I8 Mode)

BOARD	EQ (S1)
TP	ADJ TP : TP204(CH0), TP404(CH1) TP604(CH2), TP804(CH3) REF TP : TP202(CH0), TP402(CH1) TP602(CH2), TP802(CH3)
ADJ.	ADJ RF 60I8PLL numerical values (TEST RF menu)
TAPE	HDD5 color bar alignment tape (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	Voltage at ADJ TP=Voltage at REF TP±0.1V

1. Open "TEST RF" menu by pressing **TEST** key and then **F2** (RF) key.
2. Press **BS** and **F3** keys simultaneously to open "SP FUNCTION."
3. Press **F11** (ADJ RF) key and then **F12** (ADJ SEL) key to select 60I8PLL and then the 60I8PLL table is displayed.
4. Press **F6** (ADJ MODE) key to set "MANUAL".
5. Press cursor center key to display cursor.
6. Move cursor to "P.PLAY" with **F** key, **→** key, and **↓** key.
7. Press **→** key several times and set "-□□□□□□■+."
8. Insert HDD5 color bar alignment tape.
9. Press **VAR** key and **PLAY** key simultaneously and play the tape under +15% conditions.

NOTE: The column **F4** on HOME SET UP menu should be turn ON.

10. Press **F** key and **←** key simultaneously and move cursor to ADJ RF 60I8PLL. With **↓** key, move cursor to the numerical value that indicates +15.
11. Confirm that **F7** (ADJ CH) display indicates CH0.
12. Measure voltage at TP202 and TP204 with oscilloscope. With ADJUST VR, adjust values in +15% column of above menu so that voltage at TP204 is within ±0.1V to voltage at TP202.
13. Press **F7** key to change CH and then connect a test point corresponding to the CH. Adjust values in +15% column for CH1, 2, and 3 so that voltage is within the specification, as well as in step 12 for CH0.
14. Repeat steps 7 to 13 for each channel at +10%, +5%, -5%, -10%, and -15% speed.
15. Set the P.PLAY speed by the procedure in step 7. Refer to Table 4-8 for setting to each speed.

<P.PLAY Speed Settings in SP FUNCTION>

+15%	-□□□□□□■+
+10%	-□□□□□■□+
+5%	-□□□□■□□+
-5%	-□□■□□□□+
-10%	-□■□□□□□+
-15%	-■□□□□□□+

Table 4-8

4-9. Setting to 60I4 Mode

NOTE:

This setting doesn't work in tape loading condition. Confirm that VTR is in eject mode. If tape is loaded, eject the tape.

1. Open SET UP menu and press **F4** (SYSTEM) key to open SYSTEM SETUP menu.
2. Set SYSTEM to 59.94/4ch mode on SYSTEM SET UP menu.
3. Open "TEST RF" menu by pressing **TEST** key and then **F2** (RF) key.
4. Press **BS** and **F3** keys simultaneously open "SP FUNCTION."
5. Press **F11** (ADJ RF) key to display table and press **F** and **F12** (ADJ SEL) key simultaneously to select the table of 60I4.

4-10. Initial Setting of PLL Adjustment (60I4 Mode)

1. Open "TEST RF " menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 60I4PLL and then the 60I4PLL table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 60I4PLL by pressing **[F]** and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With ADJUST VR, set adjustment values displayed to the initial settings shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR, as well as CH0 setting.

ADJ RF 60I4PLL		
CH0/1/2/3	+	—
0	−65	0
5	+38	−165
10	+132	−270
15	+222	−360

4-11. Initial Setting of EQ Adjustment and INNER Setting (60I4 Mode)

1. Open "TEST RF " menu by first pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 60I4EQ and then the 60I4EQ table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 60I4EQ by pressing **[F]** and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With ADJUST VR, set adjustment values displayed to the initial settings shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR as well as CH0 setting.

ADJ RF 60I4EQ		
CH0/1/2/3	A	B
GAIN	−60	−60
M FREQ	10	10
H FREQ	−70	−70
PHASE	−30	−30
CK TMG	0	0

9. Press the cursor center key to display cursor.
10. Press **[F]** and **[→]** keys simultaneously to move cursor to display of "CONCEAL V" on bottom-left side of Front Panel Display.
11. Move cursor to display of "INNER" by pressing **[→]** key.
12. Press cursor center key to set to "INNER" to OFF.

4-12. PLL 0% Adjustment (60I4Mode)

BOARD	EQ (S1)
TP	ADJ TP : TP204(CH0), TP404(CH1) TP604(CH2), TP804(CH3) REF TP : TP202(CH0), TP402(CH1) TP602(CH2), TP802(CH3)
ADJ.	ADJ RF 60I4PLL numerical values (TEST RF menu)
TAPE	D5 color bar alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	Voltage at ADJ TP=Voltage at REF TP \pm 0.1V.

1. Open "TEST RF " menu by pressing **TEST** key and then **F2** (RF) key.
2. Press the **BS** and **F3** keys simultaneously to open "SP FUNCTION."
3. Press **F11** (ADJ RF) key and then **F12** (ADJ SEL) key to select 60I4PLL and then the 60I4PLL table is displayed.
4. Press **F6** (ADJ MODE) key to set "MANUAL".
5. Press cursor center key to display cursor.
6. Move cursor to "0" on column CH0 with **F** and **→** keys.
7. Play D5 color bar alignment tape.
8. With ADJUST VR, adjust the "0%" values so that voltage at TP204 is within $\pm 0.1V$ to voltage at TP202.
9. By same procedure in step 6 to 8, adjust each CH value (CH1 0/CH2 0/CH3 0) so that each voltage at test point is within $\pm 0.1V$ to the corresponding voltage at reference test point.

NOTE:

Confirm that voltages at TP202,402,602 and 802 are within $-0.7 \pm 0.3V$. If voltage is out of the specification, adjust the values of "CK TMG".

4-13. EQ Adjustment (60I4 Mode)

BOARD	EQ (S1)
TP	Front panel error rate display (INNER ERROR CH0 - CH3 A/B) TP203: CH0 EYE TP403: CH1 EYE TP603: CH2 EYE TP803: CH3 EYE
ADJ.	GAIN, CK TMG, H FREQ, M FREQ, PHASE (60I4 EQ: TEST RF Menu)
TAPE	D5 color bar alignment tape No.4 (VFM5080JR)
INPUT	—
MODE	PLAY
M.EQ.	—
SPEC.	Minimum error rate

1. Open "TEST RF " menu by pressing **TEST** key and then **F2** (RF) key.
2. Press **BS** and **F3** keys simultaneously to open "SP FUNCTION."
3. Press **F11** (ADJ RF) key and then **F12** (ADJ SEL) key to select 60I4EQ and then the 60I4EQ table is displayed.
4. Press **F6** (ADJ MODE) key to set "MANUAL".
5. Press **F7** (ADJ CH) key to set "CH0".
6. Play D5 color bar alignment tape.
7. Press cursor center key to display cursor.
8. Move cursor to "CK TMG".
9. Adjust value of "CK TMG" so that INNER ERROR rate of CH0 A & B are minimum.
10. Move cursor to "PHASE" of CH0 A with **F** key and **→** key, and adjust CH0 A "PHASE" value so that INNER ERROR rate is minimum.
11. Move cursor to "PHASE" of CH0 B with **F** key and **→** key, and adjust CH0 B "PHASE" value so that INNER ERROR rate is minimum.
12. Connect spectrum analyzer to TP203(CH0 EYE) and adjust value of "H FREQ" so that levels at 5MHz and 36MHz are same level.
NOTE: Connect TP403 for CH1, TP603 for CH2, TP803 for CH3.
13. Move cursor to CH0 A "M FREQ" with **F** key and **→** key, and adjust CH0 A "M FREQ" value so that INNER ERROR rate is minimum.
14. Move cursor to CH0 B "M FREQ" with **F** key and **→** key, and adjust CH0 B "M FREQ" value so that INNER ERROR rate is minimum.
15. Move cursor to CH0 A "H FREQ" with **F** key and **→** key, and adjust CH0 A "H FREQ" value so that INNER ERROR rate is minimum.
16. Move cursor to CH0 B "H FREQ" and adjust the

CH0 B "H FREQ" value so that INNER ERROR rate is minimum.

17. Select CH1 - 3 with **[F7]** (ADJ CH) key and adjust value of PHASE, H FREQ and M FREQ so that inner error rate is minimum by following the step 5 to 16 of the procedure for CH0.

NOTE:

If error rate is out of the specification, adjust H FREQ so that error rate is minimum after shifting the M FREQ by +10. If this result is better than error rate before shifting the M FREQ, adjust the H FREQ after shifting the M FREQ more by +10. If the result is not better than error rate before shifting the M FREQ, readjust H FREQ after shifting the M FREQ by -10. Search the best adjusting point by repeating this procedure. After repeating this adjustment, readjust CK TMG adjustment and PHASE adjustment.

18. Press **[F2]** (METER) key and change display from ERROR to ENV (from ERROR RATE level meter to ENVELOPE level meter).
19. Move cursor to "GAIN" A.
20. Adjust CH0 A "GAIN" value so that scale on the side of the ENVELOPE level meter reads "3 ± 0.2."
21. Select CH0 - 3 with **[F7]** (ADJ CH) key and adjust CH0 - CH3 A,B "GAIN."

key, and the **[↓]** key.

7. Press **[→]** key several times and set "-□□□□□□■+."
8. Insert D5 color bar alignment tape.
9. Press **[VAR]** key and **[PLAY]** key simultaneously and play tape under +15% conditions.

NOTE: The column **[F4]** on HOME SET UP menu should be turn ON.

10. Press **[F]** key and **[←]** key simultaneously and move cursor to ADJ RF 60I4PLL. With **[↓]** key, move cursor to numerical value that indicates +15.
11. Confirm that the **[F7]** (ADJ CH) display indicates CH0.
12. Measure voltage at TP202 and TP204 with oscilloscope. With ADJUST VR, adjust values in +15% column of above menu so that voltage at TP204 is within ±0.1V to voltage at TP202.
13. Press **[F7]** key to change CH and then connect a test point corresponding to the CH. Adjust values in +15% column for CH1, 2, and 3 so that voltage is within the specification, as well as in step 12 for CH0.
14. Repeat steps 7 to 13 for each channel at +10%, +5%, -5%, -10%, and -15% speed.
15. Set the P.PLAY speed by procedure in step 7. Refer to Table 4-14 setting to each speed.

4-14. PLL Adjustment (60I4 Mode)

BOARD	EQ (S1)
TP	ADJ TP : TP204(CH0), TP404(CH1) TP604(CH2), TP804(CH3) REF TP : TP202(CH0), TP402(CH1) TP602(CH2), TP802(CH3)
ADJ.	ADJ RF 60I4PLL numerical values (TEST RF menu)
TAPE	D5 color bar alignment tape (VFM5080JR)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	Voltage at ADJ TP=Voltage at REF TP ±0.1V.

1. Open the "TEST RF" menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 60I4PLL and then the 60I4PLL table is displayed.
4. Press **[F6]** (ADJ MODE) key to set "MANUAL".
5. Press cursor center key to display cursor.
6. Move cursor to "P.PLAY" with **[F]** key, the **[→]**

<P.PLAY Speed Settings in SP FUNCTION>

+15%	-□□□□□□■+
+10%	-□□□□□□■□+
+5%	-□□□□□■□□+
-5%	-□□■□□□□□+
-10%	-□■□□□□□□+
-15%	-■□□□□□□□+

Table 4-14

4-15. Setting to 24P Mode

NOTE:

This setting doesn't work in tape loading condition.
Confirm that VTR is in eject mode. If tape is loaded, eject the tape,

1. Open SET UP menu and press **[F4]**(SYSTEM) key to open SYSTEM SETUP menu.
2. Set SYSTEM to 23.98 mode on SYSTEM SET UP menu.
3. Open "TEST RF" menu by pressing **[TEST]** key and then **[F2]** (RF) key.
4. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
5. Press **[F11]** (ADJ RF) key to display table and press **[F]** and **[F12]** (ADJ SEL) key simultaneously to select the table of 24P8.

4-16. Initial Setting of PLL (24P Mode) Adjustment

1. Open "TEST RF " menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then the **[F12]** (ADJ SEL) key to select 24PPLL and then the 24PPLL table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 24PPLL by pressing **[F]** and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With ADJUST VR, set adjustment values displayed to the initial settings shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR, as well as CH0 setting.

ADJ RF 24PPLL		
CH0/1/2/3	+	—
0	0	0
5	+96	—100
10	+186	—205
15	+283	—310

4-17. Initial Setting of EQ Adjustment and INNER Setting (24P Mode)

1. Open "TEST RF " menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 24PEQ and then the 24PEQ table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 24PEQ by pressing **[F]** and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With ADJUST VR, set adjustment values displayed to the initial settings shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR as well as CH0 setting.

ADJ RF 24PEQ		
CH0/1/2/3	A	B
GAIN	0	0
M FREQ	-20	-20
H FREQ	-30	-30
PHASE	—30	—30
CK TMG	0	0

9. Press cursor center key to display cursor.
10. Press **[F]** and **[→]** keys simultaneously to move cursor to display of "CONCEAL V" on bottom-left side of Front Panel Display.
11. Move cursor to display of "INNER" by pressing **[→]** key.
12. Press cursor center key to set to "INNER" to OFF.

4-18. PLL0% adjustment(24P Mode)

BOARD	EQ (S1)
TP	ADJ TP : TP204(CH0), TP404(CH1) TP604(CH2), TP804(CH3) REF TP : TP202(CH0), TP402(CH1) TP602(CH2), TP802(CH3)
ADJ.	ADJ RF 24PPLL numerical values (TEST RF menu)
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	Voltage at ADJ TP=Voltage at REF TP \pm 0.1V.

1. Open "TEST RF " menu by pressing **TEST** key and then **F2** (RF) key.
2. Press **BS** and **F3** keys simultaneously to open "SP FUNCTION."
3. Press **F11** (ADJ RF) key and then **F12** (ADJ SEL) key to select 24PPLL and then the 24PPLL table is displayed.
4. Press **F6** (ADJ MODE) key to set "MANUAL".
5. Press cursor center key to display cursor.
6. Move cursor to "0" on column CH0 with **F** and **→** keys.
7. Play HDD5 color bar alignment tape.
8. With ADJUST VR, adjust the "0%" values so that voltage at TP204 is within $\pm 0.1V$ to voltage at TP202.
9. By same procedure in step 6 to 8, adjust each CH value (CH1 0/CH2 0/CH3 0) so that each voltage at test point is within $\pm 0.1V$ to the corresponding voltage at reference test point.

NOTE:

Confirm that voltages at TP202,402,602 and 802 are within $0\pm 0.3V$. If voltage is out of the specification,adjust the values of "CK TMG".

4-19. EQ Adjustment (24P Mode)

BOARD	EQ (S1)
TP	Front panel error rate display (INNER ERROR CH0 - CH3 A/B) TP203: CH0 EYE TP403: CH1 EYE TP603: CH2 EYE TP803: CH3 EYE
ADJ.	GAIN, CK TMG, H FREQ, M FREQ, PHASE (24P EQ: TEST RF Menu)
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	—
SPEC.	Minimum error rate

1. Open "TEST RF " menu by pressing **TEST** key and then **F2** (RF) key.
2. Press **BS** and **F3** keys simultaneously to open "SP FUNCTION."
3. Press **F11** (ADJ RF) key and then **F12** (ADJ SEL) key to select 24PEQ and then the 24PEQ table is displayed.
4. Press **F6** (ADJ MODE) key to set "MANUAL".
5. Press **F7** (ADJ CH) key to set "CH0".
6. Play HDD5 color bar alignment tape.
7. Press cursor center key to display cursor.
8. Move cursor to "CK TMG".
9. Adjust value of "CK TMG" so that INNER ERROR of level is as minimum.
10. Move cursor to "PHASE" of CH0 A with **F** key and **→** key, and adjust CH0 A "PHASE" value so that INNER ERROR rate is minimum.
11. Move cursor to "PHASE" of CH0 B with **F** key and **→** key, and adjust CH0 B "PHASE" value so that INNER ERROR rate is minimum.
12. Connect spectrum analyzer to TP203(CH0 EYE) and adjust value of "H FREQ" so that levels at 5MHz and 30MHz are same level.
NOTE: Connect TP403 for CH1, TP603 for CH2, TP803 for CH3.
13. Move cursor to CH0 A "M FREQ" with **F** key and **→** key, and adjust CH0 A "M FREQ" value so that INNER ERROR rate is minimum.
14. Move cursor to CH0 B "M FREQ" with **F** key and **→** key, and adjust CH0 B "M FREQ" value so that INNER ERROR rate is minimum.
15. Move cursor to CH0 A "H FREQ" with **F** key and **→** key, and adjust CH0 A "H FREQ" value so that INNER ERROR rate is minimum.
16. Move cursor to CH0 B "H FREQ" using the **F** key and **→** key, and adjust CH0 B "H FREQ"

value so that INNER ERROR rate is minimum.

17. Select CH1 - 3 with **[F7]** (ADJ CH) key and adjust value of PHASE,H FREQ and M FREQ so that inner error rate is minimum by following the steps 5 to 16 of the procedure for CH0.

NOTE:

If error rate is out of the specification, adjust H FREQ so that error rate is minimum after shifting the M FREQ by +10. If this result is better than error rate before shifting the M FREQ,adjust the H FREQ after shifting the M FREQ more by +10. If the result is not better than error rate before shifting the M FREQ, readjust H FREQ after shifting the M FREQ by -10. Search the best adjusting point by repeating this procedure. After repeating this adjustment, readjust CK TMG adjustment and PHASE adjustment.

18. Press **[F2]** (METER) key and change display from ERROR to ENV (from ERROR RATE level meter to ENVELOPE level meter).
19. Move cursor to "GAIN" A.
20. Adjust CH0 A "GAIN" value so that the scale on the side of the ENVELOPE level meter reads "3 ± 0.2."
21. Select CH0 - 3 with **[F7]** (ADJ CH) key and adjust CH0 - CH3 A,B "GAIN."

7. Press **[→]** key several times and set "-□□□□□□□+."
8. Insert HDD5 color bar alignment tape.
9. Press **[VAR]** key and **[PLAY]** key simultaneously and play tape under +15% conditions.

NOTE: The column **[F4]** on HOME SET UP menu should be turn ON.

10. Press **[F]** key and **[←]** key simultaneously and move cursor to ADJ RF 24PPLL. With **[↓]** key, move cursor to numerical value that indicates +15.
11. Confirm that the **[F7]** (ADJ CH) display indicates CH0.
12. Measure voltage at TP202 and TP204 voltage with oscilloscope. With ADJUST VR, adjust values in +15% column of above menu so that voltage at TP204 is within ±0.1V to voltage TP202.
13. Press **[F7]** key to change CH and then connect a test point corresponding to the CH. Adjust values in +15% column for CH1, 2, and 3 so that voltage is within the specification, as well as in step 12 for CH0.
14. Repeat steps 7 to 13 for each channel at +10%, +5%, -5%, -10%, and -15% speed.
15. Set the P.PLAY speed by procedure in step 7. Refer to Table 4-20 for setting to each speed.

4-20. PLL Adjustment (24P Mode)

BOARD	EQ (S1)
TP	ADJ TP : TP204(CH0), TP404(CH1) TP604(CH2), TP804(CH3) REF TP : TP202(CH0), TP402(CH1) TP602(CH2), TP802(CH3)
ADJ.	ADJ RF 24PPLL numerical values (TEST RF menu)
TAPE	HDD5 color bar alignment tape (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	Voltage at ADJ TP=Voltage at REF TP±0.1V.

1. Open "TEST RF" menu by pressing **[TEST]** key and then the **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 24PPLL and then the 24PPLL table is displayed.
4. Press **[F6]** (ADJ MODE) key to set "MANUAL".
5. Press cursor center key to display cursor.
6. Move cursor to "P.PLAY" with **[F]** key, the **[→]** key, and the **[↓]** key.

<P.PLAY Speed Settings in SP FUNCTION>

+15%	-□□□□□□□■+
+10%	-□□□□□□■□+
+5%	-□□□□□■□□+
-5%	-□□■□□□□□+
-10%	-□■□□□□□□+
-15%	-■□□□□□□□+

Table 4-20

4-21. Setting to 50I Mode

NOTE:

This setting doesn't work in tape loading condition.
Confirm that VTR is in eject mode. If tape is loaded, eject the tape,

1. Open SET UP menu and press **[F4]**(SYSTEM) key to open SYSTEM SETUP menu.
2. Set SYSTEM to 50I mode on SYSTEM SET UP menu.
3. Open "TEST RF" menu by pressing **[TEST]** key and then **[F2]** (RF) key.
4. Press the **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
5. Press **[F11]** (ADJ RF) key to display table and press **[F]** and **[F12]** (ADJ SEL) key simultaneously to select the table of 50I.

4-22. Initial Setting of PLL (50I Mode) Adjustment

1. Open "TEST RF " menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then the **[F12]** (ADJ SEL) key to select 50IPLL and then the 50IPLL table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 50IPLL by pressing **[F]** and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With ADJUST VR, set adjustment values displayed to the initial settings shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR, as well as CH0 setting.

ADJ RF 50IPLL		
CH0/1/2/3	+	—
0	+85	0
5	+180	—20
10	+280	—125
15	+390	—235

4-23. Initial Setting of EQ Adjustment and INNER Setting (50I Mode)

1. Open "TEST RF " menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Press **[F11]** (ADJ RF) key and then **[F12]** (ADJ SEL) key to select 50IEQ and then the 50IEQ table is displayed.
4. Press cursor center key to display cursor.
5. Move cursor to ADJ RF 50IEQ by pressing **[F]** and **[→]** keys simultaneously.
6. Press **[F6]** (ADJ MODE) key to set "MANUAL".
7. With ADJUST VR, set adjustment values displayed to the initial settings shown in the table below.
8. Select CH1 - 3 using **[F7]** (ADJ CH) key, and then set adjustment values to the initial settings shown in the table below using the ADJUST VR as well as CH0 setting.

ADJ RF 50IEQ		
CH0/1/2/3	A	B
GAIN	0	0
M FREQ	-20	-20
H FREQ	-30	-30
PHASE	-30	-30
CK TMG	0	0

9. Press cursor center key to display cursor.
10. Press **[F]** and **[→]** keys simultaneously to move cursor to display of "CONCEAL V" on bottom-left side of Front Panel Display.
11. Move cursor to display of "INNER" by pressing **[→]** key.
12. Press cursor center key to set to "INNER" to OFF.

4-24. PLL 0% adjustment(50I Mode)

BOARD	EQ (S1)
TP	ADJ TP : TP204(CH0), TP404(CH1) TP604(CH2), TP804(CH3) REF TP : TP202(CH0), TP402(CH1) TP602(CH2), TP802(CH3)
ADJ.	ADJ RF 50IPLL numerical values (TEST RF menu)
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	Voltage at ADJ TP=Voltage at REF TP \pm 0.1V.

1. Open "TEST RF " menu by pressing **TEST** key and then **F2** (RF) key.
2. Press **BS** and **F3** keys simultaneously to open "SP FUNCTION."
3. Press **F11** (ADJ RF) key and then **F12** (ADJ SEL) key to select 50IPLL and then the 50IPLL table is displayed.
4. Press **F6** (ADJ MODE) key to set "MANUAL".
5. Press cursor center key to display cursor.
6. Move cursor to "0" on column CH0 with **F** and **→** keys.
7. Play HDD5 color bar alignment tape.
8. With ADJUST VR, adjust the "0%" values so that voltage at TP204 is within $\pm 0.1V$ to voltage at TP202.
9. By same procedure in step 6 to 8, adjust each CH value (CH1 0/CH2 0/CH3 0) so that each voltage at test point is within $\pm 0.1V$ to the corresponding voltage at reference test point.

NOTE:

Confirm that voltages at TP202,402,602 and 802 are within $0.7 \pm 0.3V$. If voltage is out of the specification, adjust the values of "CK TMG".

4-25. EQ Adjustment (50I Mode)

BOARD	EQ (S1)
TP	Front panel error rate display (INNER ERROR CH0 - CH3 A/B) TP203: CH0 EYE TP403: CH1 EYE TP603: CH2 EYE TP803: CH3 EYE
ADJ.	GAIN, CK TMG, H FREQ, M FREQ, PHASE (50IEQ: TEST RF Menu)
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	—
SPEC.	Minimum error rate

1. Open "TEST RF " menu by pressing **TEST** key and then **F2** (RF) key.
2. Press **BS** and **F3** keys simultaneously to open "SP FUNCTION."
3. Press **F11** (ADJ RF) key and then **F12** (ADJ SEL) key to select 50IEQ and then the 50IEQ table is displayed.
4. Press **F6** (ADJ MODE) key to set "MANUAL".
5. Press **F7** (ADJ CH) key to set "CH0".
6. Play HDD5 color bar alignment tape.
7. Press cursor center key to display cursor.
8. Move cursor to "CK TMG".
9. Adjust value of "CK TMG" so that INNER ERROR rate of CH0 A & B are minimum.
10. Move cursor to "PHASE" of CH0 A with **F** key and **→** key, and adjust CH0 A "PHASE" value so that INNER ERROR rate is minimum.
11. Move cursor to "PHASE" of CH0 B with **F** key and **→** key, and adjust CH0 B "PHASE" value so that the INNER ERROR rate is minimum.
12. Connect spectrum analyzer to TP203(CH0 EYE) and adjust value of "H FREQ" so that levels at 5MHz and 30MHz are same level.
NOTE: Connect TP403 for CH1, TP603 for CH2, TP803 for CH3.
13. Move cursor to CH0 A "M FREQ" with **F** key and **→** key, and adjust CH0 A "M FREQ" value so that INNER ERROR rate is minimum.
14. Move cursor to CH0 B "M FREQ" with **F** key and **→** key, and adjust CH0 B "M FREQ" value so that INNER ERROR rate is minimum.
15. Move cursor to CH0 A "H FREQ" with **F** key and **→** key, and adjust CH0 A "H FREQ" value so that INNER ERROR rate is minimum.
16. Move cursor to CH0 B "H FREQ" with **F** key

and \rightarrow key, and adjust the CH0 B "H FREQ" value so that INNER ERROR rate is minimum.

17. Select CH1 - 3 with $\boxed{F7}$ (ADJ CH) key and adjust value of PHASE, H FREQ and M FREQ so that inner error rate is minimum by following the steps 5 to 16 of the procedure for CH0.

NOTE:

If error rate is out of the specification, adjust H FREQ so that error rate is minimum after shifting the M FREQ by +10. If this result is better than error rate before shifting the M FREQ, adjust the H FREQ after shifting the M FREQ more by +10. If the result is not better than error rate before shifting the M FREQ, readjust H FREQ after shifting the M FREQ by -10. Search the best adjusting point by repeating this procedure. After repeating this adjustment, readjust CK TMG adjustment and PHASE adjustment.

18. Press $\boxed{F2}$ (METER) key and change display from ERROR to ENV (from ERROR RATE level meter to ENVELOPE level meter).
19. Move cursor to "GAIN" A.
20. Adjust CH0 A "GAIN" value so that the scale on the side of the ENVELOPE level meter reads "3 \pm 0.2."
21. Select CH0 - 3 with $\boxed{F7}$ (ADJ CH) key and adjust CH0 - CH3 A,B "GAIN."

key, and the \downarrow key.

7. Press \rightarrow key several times and set "-□□□□ □□■+."
8. Insert HDD5 color bar alignment tape.
9. Press \boxed{VAR} key and \boxed{PLAY} key simultaneously and play tape under +15% conditions.

NOTE: The column $\boxed{F4}$ on HOME SET UP menu should be turn ON.

10. Press \boxed{F} key and \leftarrow key simultaneously and move cursor to ADJ RF 50IPLL. With \downarrow key, move cursor to numerical value that indicates +15.
11. Confirm that the $\boxed{F7}$ (ADJ CH) display indicates CH0.
12. Measure voltage at TP202 and TP204 voltage with oscilloscope. With ADJUST VR, adjust values in +15% column of above menu so that voltage at TP204 is within $\pm 0.1V$ to voltage at TP202.
13. Press $\boxed{F7}$ key to change CH and then connect a test point corresponding to the CH. Adjust values in +15% column for CH1, 2, and 3 so that voltage is within the specification, as well as in step 12 for CH0.
14. Repeat steps 7 to 13 for each channel at +10%, +5%, -5%, -10%, and -15% speed.
15. Set the P.PLAY speed by procedure in step 7. Refer to Table 4-26 for setting to each speed.

4-26. PLL Adjustment (50I Mode)

BOARD	EQ (S1)
TP	ADJ TP : TP204(CH0), TP404(CH1) TP604(CH2), TP804(CH3) REF TP : TP202(CH0), TP402(CH1) TP602(CH2), TP802(CH3)
ADJ.	ADJ RF 50IPLL numerical values (TEST RF menu)
TAPE	HDD5 color bar alignment tape NO.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	Voltage at ADJ TP=Voltage at REF TP $\pm 0.1V$.

1. Open "TEST RF" menu by pressing \boxed{TEST} key and then $\boxed{F2}$ (RF) key.
2. Press \boxed{BS} and $\boxed{F3}$ keys simultaneously to open "SP FUNCTION."
3. Press $\boxed{F11}$ (ADJ RF) key and then $\boxed{F12}$ (ADJ SEL) key to select 50IPLL and then the 50IPLL table is displayed.
4. Press $\boxed{F6}$ (ADJ MODE) key to set "MANUAL".
5. Press cursor center key to display cursor.
6. Move cursor to "P.PLAY" with \boxed{F} key, the \rightarrow

<P.PLAY Speed Settings in SP FUNCTION>

+15%	-□□□□□□■+
+10%	-□□□□□□■+
+5%	-□□□□■□□+
-5%	-□□■□□□□+
-10%	-□■□□□□□+
-15%	-■□□□□□□+

Table 4-26

4-27. REC Current Adjustment

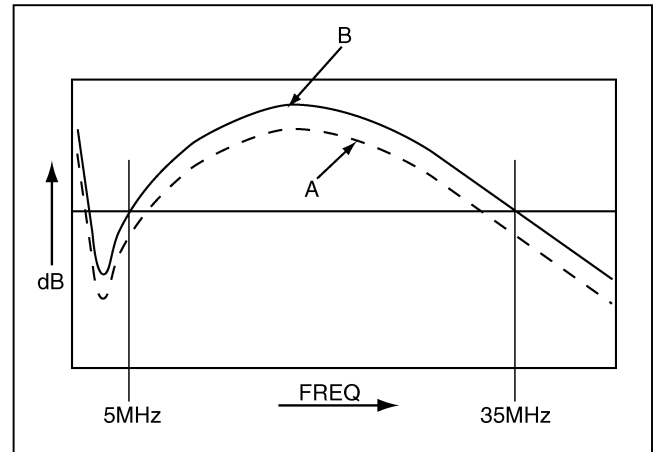
BOARD	EQ(S1)
TP	TP202(CH0 A/B), TP402(CH1 A/B) TP602(CH2 A/B), TP802(CH3 A/B)
ADJ.	CURRENT, FREQ (REC: TEST RF menu)
TAPE	D5 Alignment tape No.4 (VFM5080JR) D5 blank tape HDD5 Color bar alignment tape No.10 (VFM5080JR) HD blank tape
INPUT	INT SG (100% Color Bar)
MODE	REC/PLAY
M.EQ.	Oscilloscope Spectrum analyzer
SPEC.	Minimum error rate

REC adjustment needs to be performed in 60I 4ch, 60I 8ch, 23P and 50I mode. Please set system according to the format to be adjusted.

1. Open "TEST RF" menu by pressing **[TEST]** key and then **[F2]** (RF) key.
2. Press **[BS]** and **[F3]** keys simultaneously to open "SP FUNCTION."
3. Play alignment tape (D5 alignment tape for 60I 4 mode and HDD5 color bar alignment tape for 60I 8, 24P, 50I mode). And memorize playback spectrum to "TRACE B" memory, when playback signal has stabilized.
4. Eject alignment tape and insert blank tape (D5 blank tape for 60I 4 mode and HD blank tape for 60I 8, 24P, 50I mode), then record 100% color bar signal.
5. Press **[F11]** (ADJ RF) key to display table of "ADJ RF".
6. Press **[F12]** (ADJ SEL) key to set "60I 4 REC" ("60I 8 REC" for 60I 8 mode, "24P REC" for 24P mode, "50I REC" for 50I MODE, and confirm that **[F6]** (ADJ MODE) is set to "MANUAL" and **[F7]** (ADJ CH) is set to CH0.
7. Press cursor center key to display cursor and then move cursor to "CURRENT A" with **[F]** key and **[→]** key.
8. With ADJUST VR, adjust "CURRENT A" and "CURRENT B" so that level at 5MHz on "TRACE A" becomes -5dB to "TRACE B".
9. Press **[↓]** key and select "FREQ".
10. With ADJUST VR, adjust "FREQ A" and "FREQ B" so that level at 35MHz on "TRACE A" becomes -1 ± 1 dB to "TRACE B". (Compared level at 38MHz for 60I 8 mode, 30MHz as 24P mode, 32MHz for 50I mode)
11. Next, press **[↑]** key and select "CURRENT". Turn ADJUST VR and adjust "CURRENT A" and "CURRENT B" so that level at 5 MHz of spectrum on "TRACE A" and "TRACE B" becomes same.
12. Press **[↓]** key and select "FREQ".
13. Confirm that inner error rate is minimized by

changing value of "FREQ A" and "FREQ B". If it is not, adjust value of "FREQ A" so that CH0 A and CH0 B INNER ERROR is minimum.

14. Repeat steps 3 to 13 and execute adjustments for CH1 A/B to CH3 A/B for each TP.
15. Test point are TP402, TP602 and TP802 to input spectrum analyzer for CH1, CH2 and CH3.
16. After completed adjustment, save the adjustment value pressing **[F]** + **[F5]** (SAVE) button.

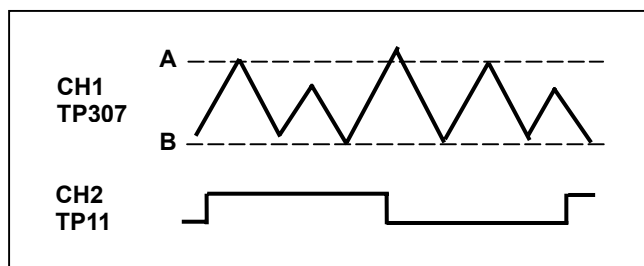


4-28. REC Envelope Level Adjustment

BOARD	REC AMP
TP	TP307(Trigger TP11: M1 P.C. Board) Front panel REC envelope meter
ADJ.	VR301
TAPE	D5 Alignment tape No.4 (VFM5080JR)
INPUT	INT SG (Color Bar)
MODE	PLAY, STILL
M.EQ.	Oscilloscope
SPEC.	TP307 waveform bottom point B = -2.0 ±0.5VDC REC envelope meter reading = 3 ± 1 scale gradation

This adjustment is for only 60I4 mode.

1. Play D5 alignment tape.
2. Open TEST SERVO menu.
3. Select **F10** (TRACKING) in TEST SERVO menu and then select "VAR."
4. Turn ADJUST VR so that front REC ENV display shows the maximum value. (If display does not appear, raise level by turning VR301 clockwise.)
5. Adjust VR301 so that front REC ENV meter reading is "3."
6. In STILL mode, confirm that waveform bottom point B is within the specification.



4-29. Confirmation of Error rate

BOARD	—
TP	Front panel Error rate level meter
ADJ.	—
TAPE	D5 Alignment tape No.4 (VFM5080JR) D5 blank tape HDD5 color bar alignment tape No.10 (VFM5089NT) HDD5 playback check tape No.11 (VFM5088NT) HD blank tape
INPUT	INT SG (100% Color Bar)
MODE	PLAY, REC
M.EQ.	—
SPEC.	See table

1080/59.94 8ch, as "60I4", for 1080/59.94 4ch, as "24P" for 1080/23.98 8ch and as is "50I" for 1080/50I.

To confirm error rate in each format, set system on SYSTEM SETUP menu according to the format to be confirmed.

Tapes for confirmation in each format

FORMAT	TAPE
60I8	HDD5 playback check tape No.11 (VFM5088NT) HD blank tape
60I4	D5 alignment tape No.4 (VFM5080JR) HD blank tape
24P	HDD5 playback check tape No.11 (VFM5088NT) HD blank tape
50I	HDD5 playback check tape No.11 (VFM5088NT) HD blank tape

NOTE: HDD5 color bar alignment tape can be used for 24P mode.

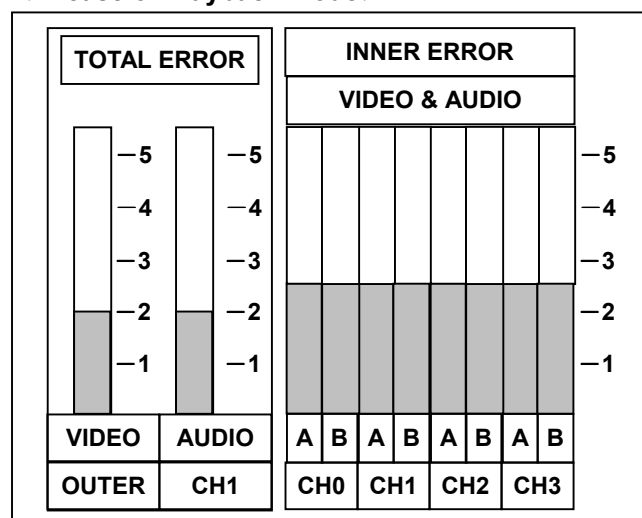
1. Set INNER and OUTER correction to OFF on TEST RF menu.
2. Confirm that all channel of INNER ERROR rate and TOTAL ERROR rate are within the specification in PLAY, REC (Confidence play) and Self-recorded playback modes.

<Specification of error rate>

	Play	Conf. Play	Self-Play
TOTAL ERROR	Under -5.0 (under 2)	Under -4.5 (under 2.5)	Under -5.0 (under 2)
INNER ERROR	Under -4.5 (Under 2.5)	Under -4.0 (Under 3)	Under -4.5 (Under 2.5)

Numerical value in parenthesis is for scale of error rate meter.

<In case of Playback mode>



On TEST RF menu, format is displayed as "60I8" for

5. CUE & TC (S2)

5-1. Initial Setting of Test Equipment

Set Audio Analyzer as follows for adjustment, unless otherwise specified.

<Audio Analyzer Setting>

GENERATOR	OUTPUT	A&B, BAL, 600 Ω FLOAT
ANALYZER	BANDWIDTH	<10Hz> 500KHz
	CHANNEL-A	INPUT 600 Ω
	CHANNEL-B	INPUT 600 Ω

In case of Audio Precision, set it as follows.

<Audio Precision Setting>

GENERATOR	OUTPUT	A&B, BAL, 600 Ω FLOAT
ANALYZER	BANDWIDTH	<10Hz> 500KHz
	CHANNEL-A	INPUT 600 Ω
	CHANNEL-B	INPUT 600 Ω

5-2. Initial Setting of VTR

Set VTR as follows for adjustment, unless otherwise specified.

Switch Name	Setting
MODE: TAPE/EE	EE
CONTROL: REMOTE/LOCAL	LOCAL
METER: FULL/FINE	FULL
REC VR: UNITY/VAR	UNITY
PB VR: UNITY/VAR	UNITY

1. Set Service SW to ON and open TEST AUDIO menu.
2. Press **[F]** and **[F10]** (Impedance select) key simultaneously set to 600 Ω .
3. Press **[F]** and **[F9]** (REF LEV) key simultaneously to set Fs-20.
4. Set Service SW to OFF.
5. Press **[F]**, **[BS]** and **[F13]** (IN LEV) key simultaneously to set INPUT LEVEL SELECT mode.
6. Press **[F5]** (CUE) to set +4dB.
7. Press **[F]**, **[BS]** and **[F12]** (OUT LEV) key simultaneously to set OUTPUT LEVEL SELECT mode.
8. Set output level to +4dB by pressing **[F5]** (CUE), **[F6]** (MONI.L) and **[F7]** (MONI.R) key.

5-3. Monitor Output Balance Adjustment

BOARD	CUE TC(S2)
TP	MONITOR OUT LCH, RCH
ADJ.	VR702(LCH), VR701(RCH)
TAPE	—
INPUT	INT.SG: 1KHz -20dBFS
MODE	EE
M.EQ.	Oscilloscope
SPEC.	Minimize level of waveform on MONITOR OUT

1. Set Audio Monitor Output signal to CH1(Lch) and CH2(Rch) by pressing AUDIO MONITOR SELECT button.
2. Open AUDIO IN menu, and then press **[F6]** (PCM) key to open "PCM INPUT SELECT" menu.
3. Set each channel to INT.SG by pressing corresponding key (**[F1]**--CH1, **[F2]**--CH2, **[F4]**--CH3, **[F5]**--CH4).
4. Open AUDIO OUT menu, and then press **[F7]** (A.MONI) key to set UNITY.
5. Connect monitor output XLR connector No. 2 pin (HOT) and No. 3 pin (COLD) to oscilloscope CH1 and CH2, respectively.
6. Set oscilloscope to ADD mode and adjust VR corresponding to each channel so that the waveform at each channel's measuring point is minimum.

5-4. CUE Output Balance Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR201
TAPE	—
INPUT	CUE IN: 4dBm/1KHz Sine wave
MODE	EE
M.EQ.	Oscilloscope
SPEC.	Minimize level of waveform on CUE OUT

1. Open AUDIO IN menu, and then press **[F7]** (INPUT SELECT CUE) key to open "CUE INPUT SELECT" menu.
2. Press **[F9]** (CUE) key to set to LINE.
3. Connect CUE output XLR connector No. 2 pin (HOT) and No. 3 pin (COLD) to oscilloscope CH1 and CH2, respectively.
4. Set oscilloscope to ADD mode and adjust VR201 so that CUE OUT waveform is minimum.

5-5. CMRR Adjustment

BOARD	CUE TC(S2)
TP	TP103
ADJ.	VR103
TAPE	—
INPUT	CUE IN: 4dBm/1KHz Sine wave (CMTST)
MODE	EE
M.EQ.	Audio Analyzer
SPEC.	Minimize each channel output level

1. Change GENERATOR OUTPUT setting of Audio Analyzer (Audio Precision) from BAL to CMTST and ANALYZER BANDWIDTH to $< 10\text{Hz} > 22\text{KHz}$.
2. Adjust VR103 so that level is minimum.
3. Return GENERATOR OUTPUT setting of Audio Analyzer (Audio Precision) from CMTST to BAL and ANALYZER BANDWIDTH to $< 10\text{Hz} > 500\text{KHz}$.

5-6. CUE Output Level Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR105
TAPE	—
INPUT	CUE IN: +4dBm/1KHz Sine wave
MODE	EE
M.EQ.	Audio Analyzer, Oscilloscope
SPEC.	+4dBm \pm 0.2dB

1. Adjust VR105 so that CUE OUT level is within the specification.
2. Connect MONITOR OUT of Audio Analyzer to CHA or CHB on oscilloscope and confirm that waveform is normal sine wave.

NOTE: In case of Audio Precision, Connect MONITOR OUT of CHA to oscilloscope and confirm that waveform is normal sine wave.

5-7. REC Meter Level Adjustment

BOARD	CUE TC(S2)
TP	CUE METER
ADJ.	VR113
TAPE	—
INPUT	CUE IN: +4dBm/1KHz Sine wave
MODE	EE
M.EQ.	Oscilloscope
SPEC.	CUE METER = -20

1. Adjust VR113 so that CUE METER on front display indicates a level of -20.
2. Measure the output of each channel with oscilloscope and confirm that sine waveform is normal.

5-8. CUE D IN Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR102
TAPE	—
INPUT	CUE IN: 4dBm/1KHz Sine wave
MODE	EE
M.EQ.	Oscilloscope
SPEC.	+4dBm \pm 0.2dB

1. Open AUDIO IN menu, and then press **[F7]** (INPUT SELECT CUE) key to open "CUE INPUT SELECT" menu.
2. Press **[F9]** (CUE) key to set to D MIX and press **[F1]** (CH1) key to set to SOURCE.
3. Open AUDIO IN menu, and then press **[F6]** (PCM) key to open "PCM INPUT SELECT" menu.
4. Press **[F1]** (CH1) key to set to ANALOG.
5. Adjust VR102 so that CUE OUT level is within the specification.
6. Open AUDIO IN menu, and then press **[F7]** (INPUT SELECT CUE) key to open "CUE INPUT SELECT" menu.
7. Press **[F9]** (CUE) key to set to LINE and press **[F1]** (CH1) key to set to OFF.

5-9. D3 Playback Equalizer Adjustment

BOARD	CUE TC(S2)
TP	TP104
ADJ.	VR110
TAPE	D3 Alignment tape No. 1 (VFM6080EC) (14:00~18:00 minute)
INPUT	—
MODE	PLAY
M.EQ.	Audio analyzer
SPEC.	See table below

1. Play AUDIO FREQUENCY RESPONSE portion (14:00 - 18:00) of D3 alignment tape No. 1, and adjust VR110 so that the level at TP104 is within the specifications shown in the following table.

<Specifications for D3 Playback EQ Adjustment (Table 1)>

Frequency	Level
1KHz	0dB
50Hz ~ 1KHz	-2.5 ~ +1.5dB
1KHz ~ 12.5KHz	-2.0 ~ +1.5dB

5-10. D5 Playback Equalizer Adjustment

BOARD	CUE TC(S2)
TP	TP105
ADJ.	VR112
TAPE	D5Alignment No. 4 (VFM5080JR) (16:00~20:00 minute)
INPUT	—
MODE	PLAY
M.EQ.	Audio Analyzer
SPEC.	See table below

1. Play AUDIO FREQUENCY RESPONSE portion (16:00 - 20:00) of D5 alignment tape No. 4, and adjust VR112 so that the level at TP105 is within the specifications shown in the following table.

<Specifications for D5 Playback EQ Adjustment (Table 2)>

Frequency	Level
1KHz	0dB
50Hz ~ 1KHz	-2.5 ~ +1.5dB
1KHz ~ 12.5KHz	-2.0 ~ +1.5dB

5-11. D3 Playback Output Level Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR104
TAPE	D3 Alignment tape No. 1 (VFM6080EC) (0:00~10:00 minute)
INPUT	—
MODE	PLAY
M.EQ.	Audio analyzer
SPEC.	+4dBm±0.2dB

1. Play CUE LEVEL portion (0:00 - 10:00) of D3 alignment tape No. 1, and adjust VR104 so that the CUE OUT level is within the specification.

5-12. D5 Playback Output Level Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR107
TAPE	D5 Alignment tape No. 4 (VFM5080JR) (0:00~15:00 minute)
INPUT	—
MODE	PLAY
M.EQ.	Audio analyzer
SPEC.	+4dBm±0.2dB

1. Play CUE LEVEL portion (0:00 - 15:00) of D5 alignment tape No. 4, and adjust VR107 so that the CUE OUT level is within the specification.

5-13. PB Meter Level Adjustment

BOARD	CUE TC(S2)
TP	CUE METER
ADJ.	VR101
TAPE	D5 Alignment tape No. 4 (VFM5080JR) (0:00~15:00 minute)
INPUT	—
MODE	PLAY
M.EQ.	—
SPEC.	CUE METER = -20

1. Play CUE LEVEL portion (0:00 - 15:00) of D5 alignment tape No. 4, and adjust VR101 so that the CUE METER indicates a level of -20.

5-14. Master OSC Adjustment

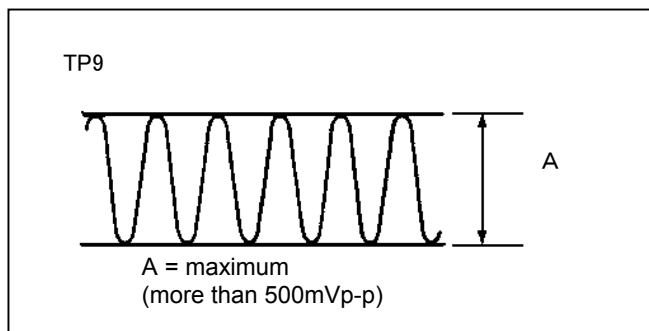
BOARD	CUE TC(S2)
TP	TP4, TP5, TP6, TP7
ADJ.	T3, T4
TAPE	D5 blank tape
INPUT	—
MODE	REC
M.EQ.	Frequency counter, Oscilloscope
SPEC.	70KHz \pm 0.2KHz, 5.5Vp-p \pm 1V (TP4, TP5) 140KHz \pm 5KHz, 5.5Vp-p \pm 1V (TP6, TP7)

1. Insert blank tape into VTR and start recording.
2. Connect frequency counter to TP4 and confirm that frequency is 70KHz \pm 0.2kHz. If frequency is out of the specification, adjust T3.
3. With oscilloscope, confirm that level at TP4 and TP5 are 5.5Vp-p \pm 1V at this time, and that level at TP6 and TP7 are also 5.5Vp-p \pm 1V and frequency is 140kHz \pm 5kHz. If levels or frequency are out of the specifications, adjust T4.

5-15. Full Erase Current Adjustment

BOARD	CUE TC(S2)
TP	TP9
ADJ.	T5
TAPE	D5 blank tape
INPUT	—
MODE	REC
M.EQ.	Oscilloscope
SPEC.	More than 500mVp-p

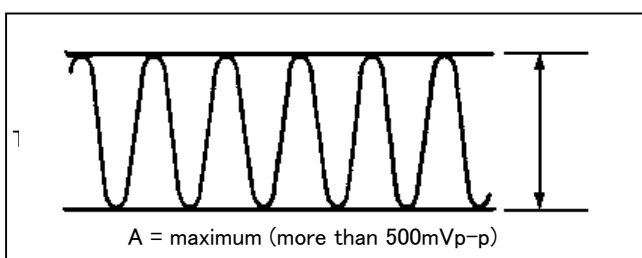
1. Insert blank tape into VTR and start recording.
2. Connect TP9 to oscilloscope and adjust T5 so that the maximum waveform is obtained. Confirm that level of waveform is more than 500mVp-p at this time.



5-16. CUE Erase Current Adjustment

BOARD	CUE TC(S2)
TP	TP10
ADJ.	T6
TAPE	D5 blank tape
INPUT	—
MODE	REC
M.EQ.	Oscilloscope
SPEC.	More than 500mVp-p

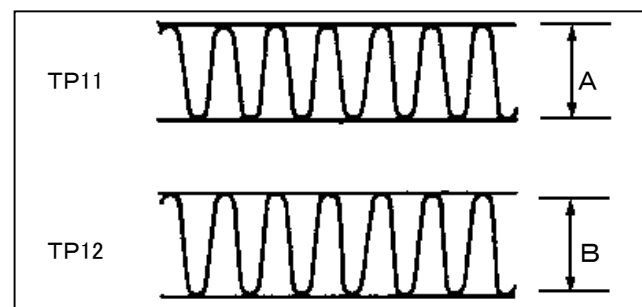
1. Insert blank tape into VTR and start recording.
2. Connect TP10 to oscilloscope and adjust T6 so that the maximum waveform is obtained. Confirm that level of waveform is more than 500mVp-p at this time.



5-17. TC/CTL Erase Current Adjustment

BOARD	CUE TC(S2)
TP	TP11, TP12
ADJ.	T7, T8
TAPE	D5 blank tape
INPUT	—
MODE	REC
M.EQ.	Oscilloscope
SPEC.	A & B = more than 500mVp-p or levels at TP11 and TP12 are same.

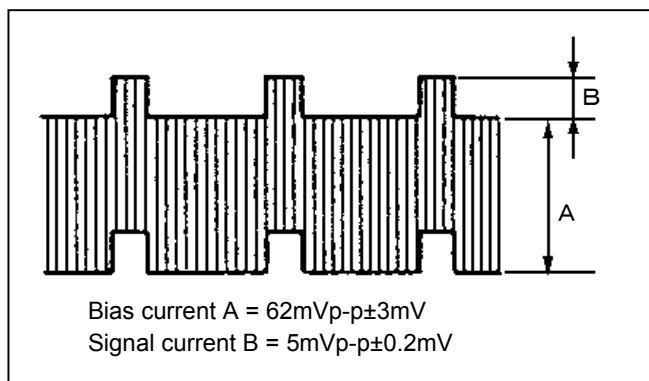
1. Insert blank tape into VTR and start recording.
2. Connect TP11 and TP12 to oscilloscope and confirm that the maximum waveform is more than 500mVp-p. If levels is not more than 500mVp-p, adjust T7 and T8 so that TP11 and TP12 levels are the same.



5-18.TC Bias & Signal Current Adjustment

BOARD	CUE TC(S2)
TP	TP3, between TP301 and TP302
ADJ.	T1, VR1, VR301
TAPE	D5 blank tape
INPUT	—
MODE	REC
M.EQ.	Oscilloscope
SPEC.	TP3 = maximum Bias current (A) = 62mVp-p±3mV Signal current (B) = 5mVp-p±0.2mV

1. Insert blank tape into VTR and start recording.
2. Connect TP3 to oscilloscope and adjust the T1 core so that the maximum waveform is obtained.
3. With oscilloscope probe, clip together TP301 and TP302 (probe GND) and adjust VR301 so that bias current is 62mVp-p±3mV and the signal current is 5mVp-p±0.2mV.



5-19. CUE Bias Current Adjustment

BOARD	CUE TC(S2)
TP	TP2, between TP107 and TP106
ADJ.	T2, VR2
TAPE	D5 blank tape
INPUT	—
MODE	REC
M.EQ.	DVM, Oscilloscope
SPEC.	TP2 = maximum 17mV±0.5mV (between TP107 and TP106)

1. Insert blank tape into VTR and start recording.
2. Connect TP2 to oscilloscope and adjust T2 so that the maximum waveform is obtained.
3. Adjust VR2 so that level between TP107 and TP106 (probe GND) is 17mV±0.5mV.

5-20. REC Current Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR108
TAPE	D5 blank tape
INPUT	CUE IN: +4dBm/1KHz Sine wave
MODE	REC/PLAY
M.EQ.	Audio Analyzer
SPEC.	+4dBm±0.2dB

1. Insert blank tape into VTR and start recording for a few minutes.
2. Play the just recorded portion.
3. Adjust VR108 so that CUE OUT level is +4dBm±0.2dBm.

5-21. REC Equalizer Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR109, VR111, FL105
TAPE	D5 blank tape
INPUT	CUE IN: -6dB Sweep signal
MODE	REC/PLAY
M.EQ.	Audio analyzer
SPEC.	See table below

1. Record input signal as a sweep signal and playback just recorded portion. During playback, adjust VR109, VR111, and FL105 so that CUE OUT level is within the specifications shown in the following table.

<Specifications for Record EQ Adjustment (Table 3)>

Frequency	Level
1KHz	0dB
50Hz ~ 1KHz	-2.5 ~ +1.5dB
1KHz ~ 12KHz	-2.0 ~ +1.0dB

5-22. CUE REC Current Adjustment

BOARD	CUE TC(S2)
TP	CUE OUT
ADJ.	VR108
TAPE	D5 blank tape
INPUT	CUE IN: +4dBm/1KHz Sine wave
MODE	REC/PLAY
M.EQ.	Audio analyzer
SPEC.	CUE OUT = +4dBm \pm 0.2dB CUE OUT distortion = less than 3%

1. Insert blank tape into VTR and record input signal for a few minutes.
2. Play the just recorded portion.
3. Adjust VR108 so that CUE OUT level is +4dBm \pm 0.2dBm.
4. Record 1KHz/+11dBm signal and play the just recorded portion.
5. Confirm that distortion is less than 3%. If it is not, re-adjust bias current by adjusting VR2 (CUE BIAS Current ADJ.).For this confirmation, ANALYZER BANDWIDTH of Audio Analyzer(Audio Precision) is set to < 10Hz > 22KHz.
6. After above confirmation, ANALYZER BANDWIDTH of Audio Analyzer(Audio Precision) should be set to < 10Hz > 500KHz.

<Specifications for Monitor Out Level>

Output Level	Specification
+4dB	+4dB \pm 0.1dB
0dB	0dBm \pm 0.5dB
-20dB	-20dBm \pm 1.0dB

5-23. Monitor Output Level Adjustment

BOARD	CUE TC(S2)
TP	MONITOR OUT LCH, RCH
ADJ.	VR602(LCH), VR601(RCH)
TAPE	—
INPUT	INT SG: Fs-20dBm/1KHz Sine wave
MODE	EE
M.EQ.	Audio analyzer, Oscilloscope
SPEC.	+4dBm \pm 0.1dB

1. Adjust VR601 (RCH) and VR602 (LCH) so that MONITOR OUT level is within the specification.
2. Open TEST AUDIO menu and press **[F]** , **[BS]** and **[F12]** (OUT LEV) keys simultaneously to set OUTPUT LEVEL SELECT mode.
3. Press **[F6]** (MONI.L) and **[F7]** (MONI.R) keys to change MONITOR OUTPUT LEVEL.
4. Confirm that MONITOR OUT level is within the specifications shown in the following table.
5. After above confirmation is finished, return the setting of MONITOR OUT LEVEL to +4dB.

6. AUDIO ADDA (S3)

6-1. Initial Setting of Test Equipment

Set Audio Analyzer as follows for adjustment, unless otherwise specified.

<Audio Analyzer Setting>

GENERATOR	OUTPUT	A&B, BAL, 600 Ω FLOAT
ANALYZER	BANDWIDTH	<10Hz> 500KHz
	CHANNEL-A	INPUT 600 Ω
	CHANNEL-B	INPUT 600 Ω

In case of Audio Precision, set it as follows.

<Audio Precision Setting>

GENERATOR	OUTPUT	A&B, BAL, 600 Ω FLOAT
ANALYZER	BANDWIDTH	<10Hz> 500KHz
	CHANNEL-A	INPUT 600 Ω
	CHANNEL-B	INPUT 600 Ω

6-2. Initial Setting of VTR

Set VTR as follows for adjustment, unless otherwise specified.

Switch Name	Setting
MODE: TAPE/EE	EE
CONTROL: REMOTE/LOCAL	LOCAL
METER: FULL/FINE	FULL
REC VR: UNITY/VAR	UNITY
PB VR: UNITY/VAR	UNITY

1. Set Service SW to ON and open TEST AUDIO menu.
2. Press **[F]** and **[F10]** (Impedance select) key simultaneously to set to 600 Ω .
3. Press **[F]** and **[F9]** (REF LEV) key simultaneously set to Fs-20.
4. Set Service SW to OFF.
5. Press **[F]**, **[BS]** and **[F13]** (IN LEV) keys simultaneously to set INPUT LEVEL SELECT mode.
6. Press **[F1]** (CH1), **[F2]** (CH2), **[F3]** (CH3) and **[F4]** (CH4) key to set to +4dB for each channels.
7. Press **[F]**, **[BS]** and **[F12]** (OUT LEV) key simultaneously to set OUTPUT LEVEL SELECT mode.
8. Press **[F1]** (CH1), **[F2]** (CH2), **[F3]** (CH3) and **[F4]** (CH4) key to set to +4dB for each channels.

6-3. Output Balance Adjustment

BOARD	A ADDA(S3)
TP	AUDIO OUT CH1~CH4
ADJ.	VR402(CH1), VR502(CH2) VR602(CH4), VR702(CH4)
TAPE	—
INPUT	INT.SG: 1KHz -20dBFS
MODE	EE
M.EQ.	Oscilloscope
SPEC.	Minimize level of each channel waveform

1. Open AUDIO IN menu, and then press **[F6]** (PCM) key to open "PCM INPUT SELECT" menu.
2. Set each channel to INT.SG by pressing corresponding key (**[F1]**--CH1, **[F2]**--CH2, **[F4]**--CH3, **[F5]**--CH4).
3. Connect each channel's AUDIO OUT XLR connector No. 2 pin (HOT) and No. 3 pin (COLD) to oscilloscope CH1 and CH2, respectively.
4. Set oscilloscope to ADD mode and adjust VR corresponding to each channel so that the waveform at each channel's measuring point is minimum.

6-4. CMRR Adjustment

BOARD	A ADDA(S3)
TP	TP2(CH1), TP102(CH2) TP202(CH3), TP302(CH4)
ADJ.	VR1(CH1), VR101(CH2) VR201(CH3), VR301(CH4)
TAPE	—
INPUT	AUDIO IN (CH1~CH4) 4dBm/1KHz Sine wave (CMTST)
MODE	EE
M.EQ.	Audio analyzer
SPEC.	Minimize the output level of each channel

1. Open AUDIO IN menu and then press the **[F6]** (PCM) key to open "PCM INPUT SELECT" menu.
2. Set each channel to ANALOG by pressing corresponding key (**[F1]**--CH1, **[F2]**--CH2, **[F4]**--CH3, **[F5]**--CH4).
3. Change GENERATOR OUTPUT setting of Audio Analyzer (Audio Precision) from BAL to CMTST and ANALYZER BANDWIDTH to < 10Hz > 22KHz.
4. Adjust VR corresponding to each channel so that waveform at each channel's measuring point is minimum.
5. Return GENERATOR OUTPUT setting of Audio Analyzer (Audio Precision) from CMTST to BAL and ANALYZER BANDWIDTH to < 10Hz > 500KHz.

6-5. Input Level Adjustment

BOARD	A ADDA(S3)
TP	AES/EBU OUT CH1~CH4
ADJ.	VR2(CH1), VR201(CH2) VR202(CH3), VR302(CH4)
TAPE	—
INPUT	AUDIO IN (CH1 – CH4) +4dBm/1KHz Sine wave
MODE	EE
M.EQ.	Audio analyzer, Oscilloscope
SPEC.	-20dBFS±0.05dB

1. Adjust VR corresponding to each channel so that AES/EBU OUT level of each channel is within the specification.
2. Connect MONITOR OUT CHA or CHB of audio analyzer to oscilloscope, and measure each channel's output waveform, and confirm that sine waveform is normal.

NOTE: In case of Audio Precision, Connect MONITOR OUT of CHA to oscilloscope and confirm that waveform is normal sine wave.

6-6. Output Level Adjustment

BOARD	A ADDA(S3)
TP	AUDIO OUT CH1~CH4
ADJ.	VR401(CH1), VR501(CH2) VR602(CH3), VR702(CH4)
TAPE	—
INPUT	AUDIO IN (CH1~CH4) +4dBm/1KHz Sine wave
MODE	EE
M.EQ.	Audio analyzer, Oscilloscope
SPEC.	+4dB±0.1dB

1. Adjust VR corresponding to each channel so that AUDIO OUT level of each channel is within the specification.
2. Measure each channel's output waveform and confirm that the sine waveform is normal.

7. SDI (S4、S5)

Set SYSTEM format to 525/59.94i, unless otherwise specified

Note: Basically SD SDI 100% color bar signal is required as input signal for item 7-3 to 7-13 adjustment. If you do not have SD SDI signal generator, input the HD SDI 100% color bar signal (AJ-UDC3700 required). In case VTR does not have DOWN CONVERTER (UDC3700), use INT SG (100% color bar) of VTR. Basically SD SDI input signal is required for SD OUT board adjustment. In unavoidable case only, use INT SG signal of VTR.

7-1. 1.2V (S5) Adjustment

BOARD	SDI IN (S5)
TP	C18 left-side land (component side : A4)
AJD.	VR1
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	DVM
SPEC.	1.22V \pm 0.01V

1. Measure the voltage between measuring point and GND with a DVM and adjust VR1 so that the voltage is within the specification.

7-2. 1.2V (S4) Adjustment

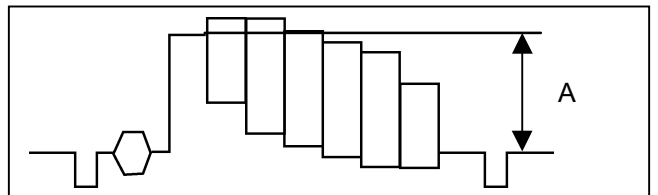
BOARD	SDI OUT (S4)
TP	TP1004
AJD.	VR1
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	DVM
SPEC.	1200 \pm 2mV

1. Confirm that the voltage between TP1004 and GND with a DVM and adjust VR1 so that the voltage is within the specification.

7-3. Composite Out Level Adjustment (VIDEO OUT 1)

BOARD	SDI OUT (S4)
TP	VIDEO OUT1
AJD.	VR3 (ENC LEVEL)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	A = 714mV \pm 5mV

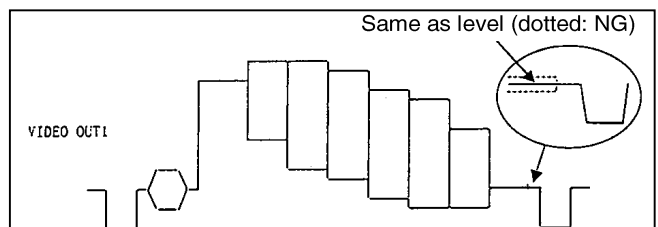
1. Adjust VR3 so that video level is within the specification.



7-4. Composite Offset Sync Level Adjustment 1 (VIDEO OUT 1)

BOARD	SDI OUT (S4)
TP	VIDEO OUT 1
AJD.	VR4(OFS NTSC)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	Reference level of sync is the same as pedestal level

1. Adjust VR4 so that reference level of sync and pedestal level are within the specification as shown figure.



7-5. Composite Sync Level Adjustment

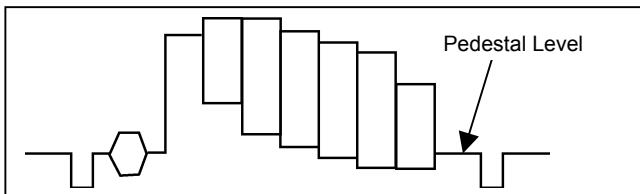
BOARD	SDI OUT (S4)
TP	VIDEO OUT1
AJD.	VR2 (SYNC LEVEL)
TAPE	—
INPUT	SD SDI IN: 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	A = 286mV \pm 3mV

1. Adjust VR2 so that level is within the specification.

7-6. Composite Out DC Level Adjustment (VIDEO OUT 1)

BOARD	SDI OUT (S4)
TP	VIDEO OUT1
AJD.	VR7(ENC DC LVL)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	0mV \pm 3mV

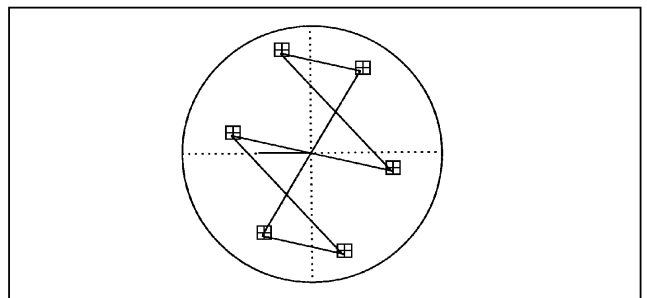
1. Adjust VR7 so that the pedestal level is within the specification.



7-7. Composite Frequency Response Adjustment 1

BOARD	SDI OUT (S4)
TP	VIDEO OUT 1
AJD.	VR6(ENC FREQ)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	Vector Scope
SPEC.	All vectors are in the inner boxes

1. Adjust VR6 so that each vectors are within the specification.

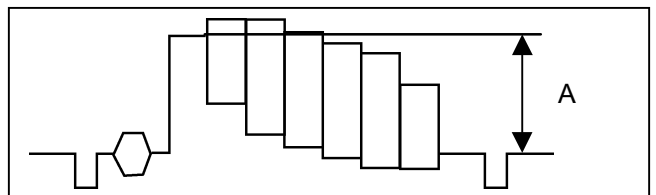


NOTE: SET UP is 0% and if the vector scope does not work with 100% color bar input, use 75% color bar.

7.8 Composite Out Level Adjustment (VIDEO OUT 3)

BOARD	SDI OUT (S4)
TP	VIDEO OUT1
AJD.	VR8 (MONI ENC LEVEL)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	A = 714mV \pm 5mV

1. Adjust VR8 so that video level is within the specification.



7-9 . Composite Offset Sync Level Adjustment 2 (VIDEO OUT 3)

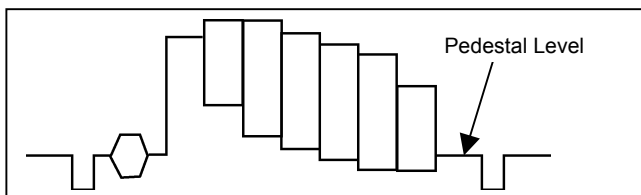
BOARD	SDI OUT (S4)
TP	VIDEO OUT 1
AJD.	VR9(MONI OFST NTSC)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	Reference level of sync is the same as pedestal level

1. Adjust VR9 so that reference level of sync and pedestal level are within the specification as shown figure.

7-10. Composite Out DC Level Adjustment (VIDEO OUT 3)

BOARD	SDI OUT (S4)
TP	VIDEO OUT 3
AJD.	VR12(ENC DC LVL)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	0mV \pm 3mV

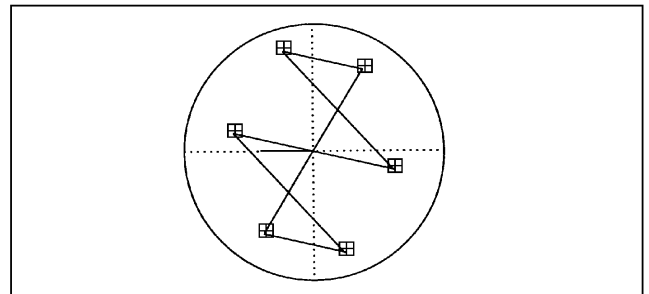
1. Adjust VR12 so that pedestal level is within the specification.



7-11. Composite Frequency Response Adjustment 2

BOARD	SDI OUT (S4)
TP	VIDEO OUT 3
AJD.	VR11(MON ENC FREQ)
TAPE	—
INPUT	SD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	Vector Scope
SPEC.	All vectors are in the inner boxes

1. Adjust VR11 so that each vectors are within the specification.

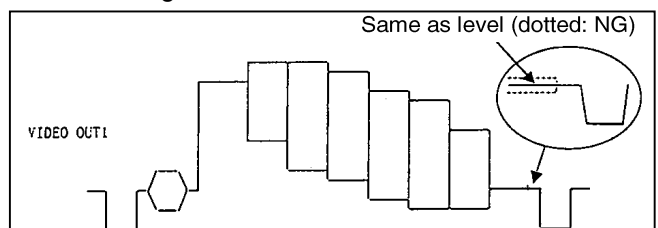


NOTE: SET UP is 0% and if the vector scope does not work with 100% color bar input, use 75% color bar.

7-12. Composite Offset Sync Level Adjustment 3 (VIDEO OUT 1)

BOARD	SDI OUT (S4)
TP	VIDEO OUT 1
AJD.	VR5(OFST PAL)
TAPE	—
INPUT	HD SDI IN : 100% Color Bar signal
MODE	EE
M.EQ.	WFM
SPEC.	Reference level of sync is the same as pedestal level

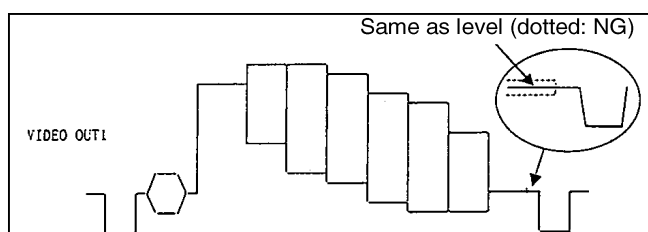
1. Set system to 1080/50I mode.
2. Adjust VR5 so that reference level of sync and pedestal level are within the specification as shown figure.



7-13. Composite Offset Sync Level Adjustment 4 (VIDEO OUT 3)

BOARD	SDI OUT (S4)
TP	VIDEO OUT 3
AJD.	VR10(MONI OFST PAL)
TAPE	—
INPUT	HD SDI IN : 100% Color Bar signal
FORMAT	1080/50I
MODE	EE
M.EQ.	WFM
SPEC.	Reference level of sync is the same as pedestal level

1. Set system to 1080/50I mode.
2. Adjust VR10 so that reference level of sync and pedestal level are within the specification as shown figure.



8. D5 RECPB (L1)

8-1. PCON-PLL Range Adjustment(1)

BOARD	D5 RECPB (L1)
TP	C4808+side (Component side: D5)
ADJ.	VR4801
TAPE	—
INPUT	—
MODE	EJECT、EE2(STATE)
M.EQ.	Oscilloscope
SPEC.	+4.0±0.2V

1. Set system to 1080/59.94i 4ch mode.
2. Set STATE to EE2.
3. Adjust VR4801 so that C4808 positive-side DC voltage is within the specification.

8-2. PCON-PLL Range Adjustment(2)

BOARD	D5 RECPB (L1)
TP	C4806+side (Component side :D6)
ADJ.	VR4800
TAPE	—
INPUT	—
MODE	EJECT、EE2(STATE)
M.EQ.	Oscilloscope
SPEC.	+3.5±0.2V

1. Set system to 1080/59.94i 4ch mode.
2. Set STATE to EE2.
3. Adjust VR4800 so that C4806 positive-side DC voltage is within the specification.

8-3. SDI IN-PLL Range Adjustment

BOARD	D5 RECPB (L1)
TP	C4905+side (Component side :E7)
ADJ.	VR4901
TAPE	—
INPUT	—
MODE	EJECT、EE2(STATE)
M.EQ.	Oscilloscope
SPEC.	+2.5±0.2V

1. Set system to 1080/23.98p mode.
2. Set STATE to EE2.
3. Adjust VR4901 so that C4905 positive-side DC voltage is within the specification.

8-4. Frame Rate Conversion Play PLL Range Adjustment

BOARD	D5 RECPB (L1)
TP	C4108+side (Component side: B5)
ADJ.	VR4001
TAPE	HDD5 color bar alignment tape No.10 (VFM5089NT)
INPUT	—
MODE	PLAY
M.EQ.	Oscilloscope
SPEC.	+2.5±0.2V

1. Set system to 1080/50i mode.
2. Play HDD5 color bar alignment tape.
3. Adjust VR4001 so that C4108 positive-side DC voltage is within the specification.

9. PB PROC (L2)

9-1. NTSC 4fsc Free Run Frequency Adjustment

BOARD	PB PROC (L2)
TP	TP162
ADJ.	VR9 (NTSC FREQ)
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	Frequency counter
SPEC.	14.318180MHz \pm 200Hz

1. Set system to 1080/59I 4ch mode.
2. Disconnect all REF input and SDI input.
3. Adjust VR9 so that frequency at TP162 is within the specification.

9-2. 74MHz(59Hz) Free Run Frequency Adjustment

BOARD	PB PROC (L2)
TP	TP161
ADJ.	VR13 (HD FREQ59)
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	Frequency counter
SPEC.	74.175800MHz \pm 200Hz

1. Set system to 1080/59I 4ch mode.
2. Disconnect all REF input and SDI input.
3. Adjust VR13 so that frequency at TP161 is within the specification.

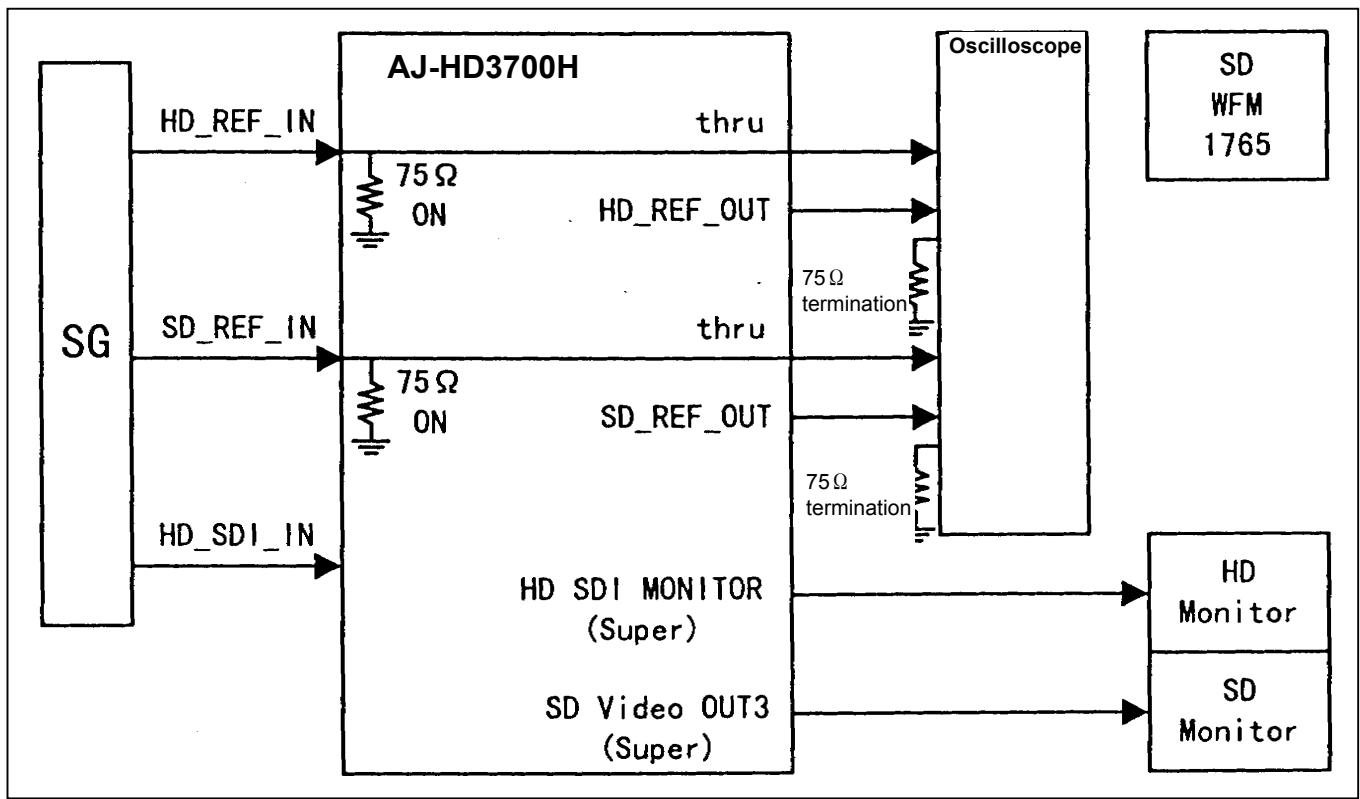
9-3. 36MHz(59Hz) Phase Adjustment

BOARD	PB PROC (L2)
TP	—
ADJ.	VR14
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	—
SPEC.	Center \pm 0.5 scale

1. Set VR14 in the center position.

9-4. Connections (1)

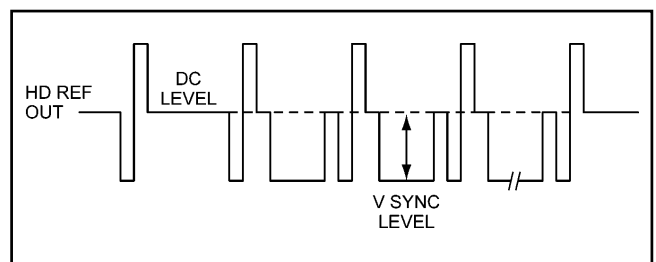
The connections shown below apply to the adjustment procedure in items 9-5 to 9-10.



NOTE: All cables should be used for 75 Ω cable and same length (1.5m, for example).

9-5. HD REF OUT Level Adjustment

BOARD	PB PROC (L2)
TP	HD REF OUT
ADJ.	VR20 (HD REF LEVEL) VR22 (HD REF DC)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal HD REF IN: 1080/59I TriSync signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	Sync = $300 \pm 3\text{mV}$ DC = $0 \pm 3\text{mV}$



1. Set the system to 1080/59I 4ch mode.
2. Adjust VR20 (Sync) and VR22 (DC) so that each voltage level is within the specification.

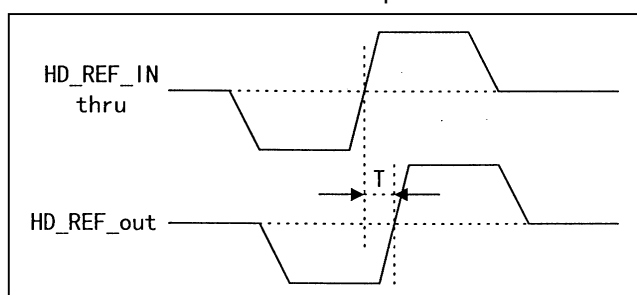
NOTE:

Connect 75 Ω termination to HD REF OUT when measuring it with oscilloscope.

9-6. HD_REF SYS_H Adjustment

BOARD	PB PROC (L2)
TP	HD REF OUT HD REF IN THOU OUT
ADJ.	VR11 (HD59 H PHASE)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal SD REF IN: 525/59I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	$T = 0 \pm 50 \text{ nsec}$

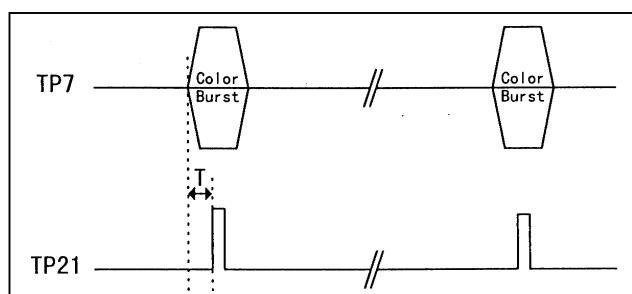
1. Set system to 1080/59I 4ch mode.
2. Adjust VR11(HD59 H PHASE) so that phase difference T between HD REF IN THOU OUT and HD REF OUT is within the specification.



9-7. Burst Sampling Phase Adjustment

BOARD	PB PROC (L2)
TP	TP7, TP21
ADJ.	VR4 (NTSC S/H)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal SD REF IN: 525/59I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	$T = 1.2 \mu \pm 0.1 \mu \text{ sec}$

1. Set system to 1080/59I 4ch mode.
2. Adjust VR4 (NTSC S/H) so that phase difference T between the TP21 (sample pulse) and TP7 (burst signal) is within the specification.

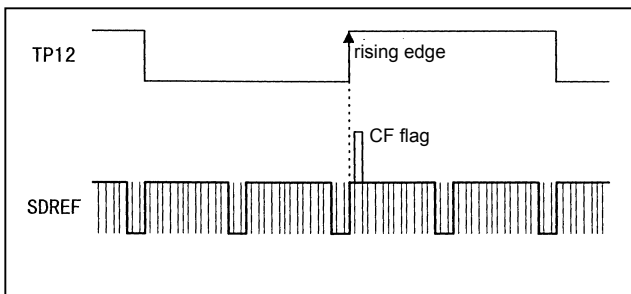


NOTE: Disconnect HD REF IN (OUT REF = AUTO).

9-8. CF Phase Adjustment (1)

BOARD	PB PROC (L2)
TP	SD REF IN THOU OUT TP12
ADJ.	VR6 (NTSC CF)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal SD REF IN: 525/59I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	Meet phase between CF flag of SD REF Input signal and rising edge of pulse at TP12

1. Set system to 1080/59I 4ch mode.
2. Input same signal as SD REF IN input signal (SD REF IN THOU) into oscilloscope.
3. Turn VR6 fully counterclockwise.
4. Turn VR6 clockwise and adjust it so that phase meets between the CF flag of SD REF IN and rising edge of pulse at TP12 synchronized.



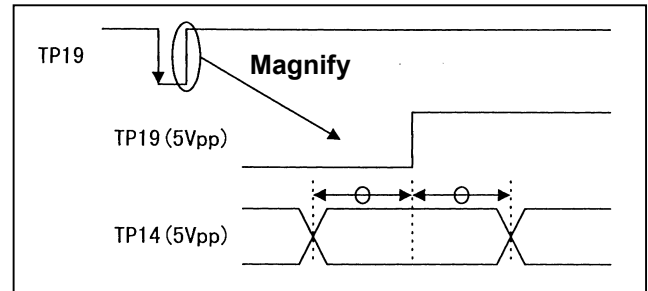
NOTE: Disconnect HD REF IN (OUT REF = AUTO).

9-9. CF Phase Adjustment (2)

BOARD	PB PROC (L2)
TP	TP14, TP19
ADJ.	VR6 (NTSC CF)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal SD REF IN: 525/59I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	$\pm 5\text{nsec}$ from center

1. Set system to 1080/59I 4ch mode.
2. Connect TP19 to oscilloscope as trigger and set trigger at TP19 rising edge. Confirm waveform at rising edge that is displayed at this time.

3. Adjust VR6 so that TP19 rising edge is in the center of TP14 data waveform.
4. Confirm that the specification of CF phase adjustment (1).



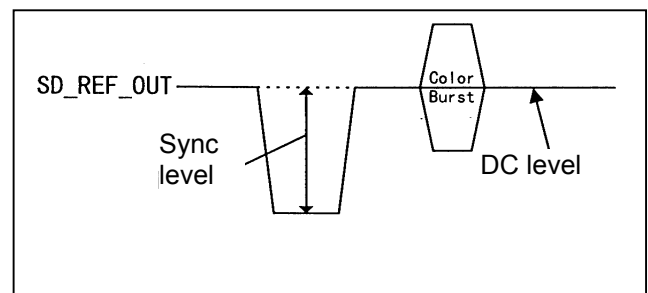
NOTE: Disconnect HD REF IN (OUT REF = AUTO).

9-10. SD REF OUT Adjustment

BOARD	PB PROC (L2)
TP	SD REF OUT
ADJ.	VR19 (SD REF LEVEL) VR21 (SD REF DC)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal SD REF IN: 525/59I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	Sync = $-286 \pm 3\text{mV}$ DC = $0 \pm 3\text{mV}$

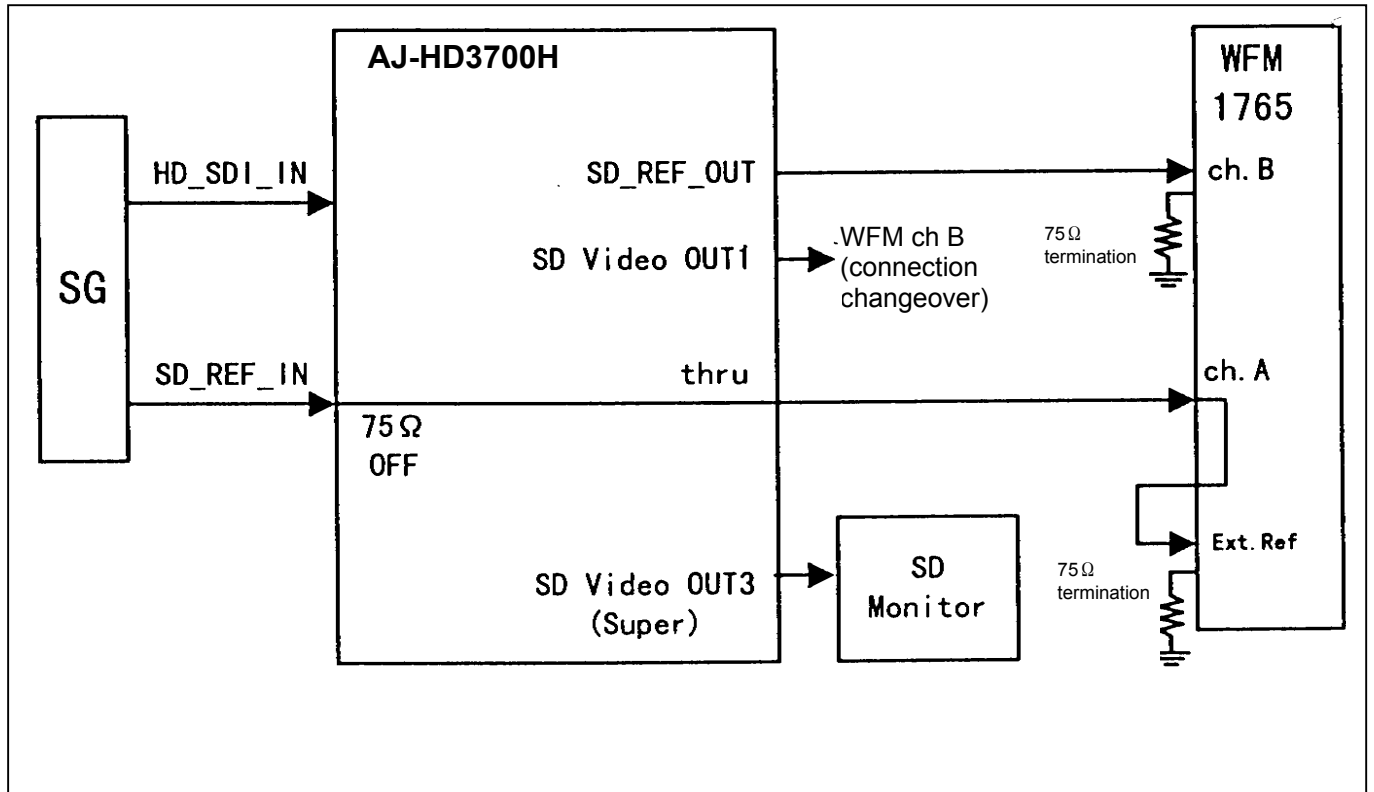
1. Set system to 1080/59I 4ch mode.
2. Adjust VR19 (Sync) and VR21 (DC) so that each voltage levels are within the specification.

NOTE: Disconnect HD REF IN (OUT REF = AUTO).



9-11. Connections (2)

The connections shown below apply to the adjustment procedure in items 9-12 to 9-15.



9-12.SD_REF SYS_SC Adjustment

BOARD	PB PROC (L2)
TP	SD REF OUT SD REF IN THOU OUT
ADJ.	VR16 (SD REF PHASE) VR2 (H PHASE NT)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal SD REF IN: 525/59I Black Burst signal.
MODE	EE, EJECT
M.EQ.	Oscilloscope, WFM
SPEC.	SD REF OUT SC phase difference is within $\pm 15^\circ$ against SD REF IN

1. Set system to 1080/59I 4ch mode.
2. Input same signal as SD REF IN (SD REF IN THOU OUT) to CH A and EXT REF input terminal on WFM. And input SD REF OUT signal into CH B on WFM.
3. Set WFM to EXT REF mode and line up phase of burst vector on CH A.
4. Adjust VR16 so that CH B burst phase matches CH A burst phase.
5. Turn power on and off and confirm that SC and H phases are the same.

9-13.SD_SYS SYS_SC Adjustment

BOARD	PB PROC (L2)
TP	VIDEO OUT 1 SD REF IN THOU OUT
ADJ.	VR17 (NT VPHASE)
TAPE	—
INPUT	HD SDI IN: 1080/59I Color Bar signal SD REF IN: 525/59I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope, WFM
SPEC.	VIDEO OUT 1 SC phase difference is within $\pm 30^\circ$ against SD REF IN

1. Set system to 1080/59I 4ch mode.
2. Input same signal as SD REF IN (SD REF IN THOU OUT) to CH A and EXT REF input terminal on WFM. And input VIDEO OUT 1 signal into CH B on WFM.
3. Set WFM to EXT REF mode and line up phase of burst vector on CH A.
4. Adjust VR17 so that CH B burst phase matches CH A burst phase.

9-14.PAL 4fsc Free Run Frequency Adjustment

BOARD	PB PROC (L2)
TP	TP162
ADJ.	VR8(PAL FREQ)
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	Frequency counter
SPEC.	17.734476MHz \pm 200Hz

1. Set system to 1080/50I mode.
2. Disconnect all REF input and SDI input.
3. Adjust VR8 so that frequency at TP162 is within the specification.

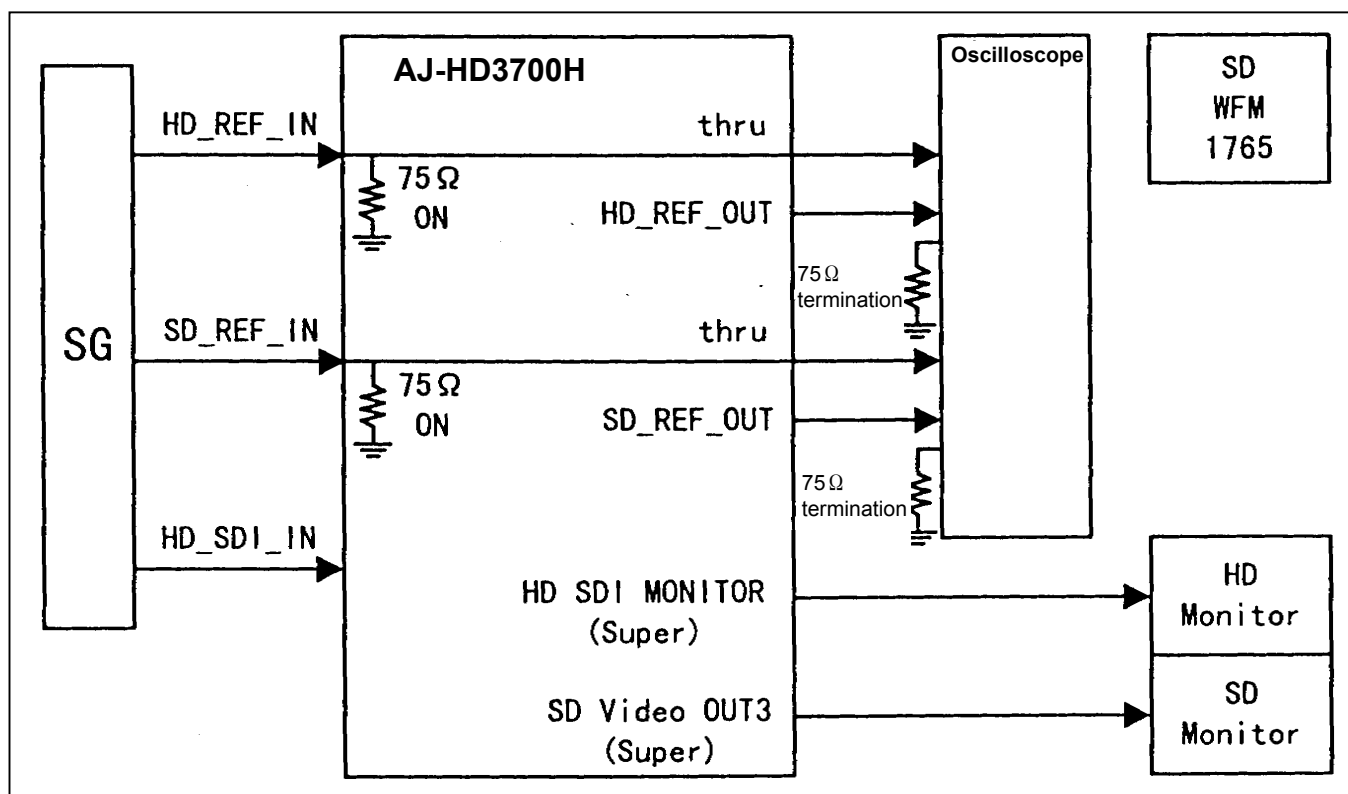
9-15.74MHz(50Hz) Free Run Frequency Adjustment

BOARD	PB PROC (L2)
TP	TP161
ADJ.	VR12(HD FREQ60)
TAPE	—
INPUT	—
MODE	EJECT
M.EQ.	Frequency counter
SPEC.	74.250000MHz \pm 200Hz

1. Set system to 1080/50I mode.
2. Disconnect all REF input and SDI input.
3. Adjust VR12 so that frequency at TP161 is within the specification.

9-16. Connections (3)

The connections shown below apply to the adjustment procedure in items 9-17 to 9-19.



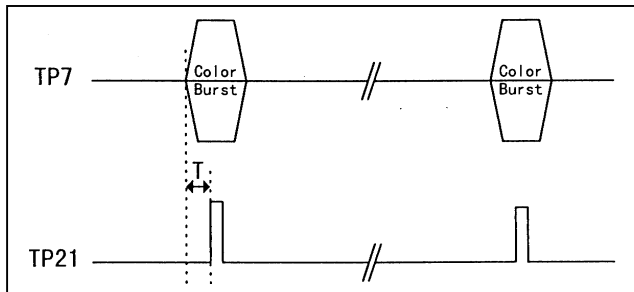
NOTE:

All cables should be used for 75 Ω cable and same length(1.5m, for example).

9-17.PAL Burst Sampling Phase Adjustment

BOARD	PB PROC (L2)
TP	TP7, TP21
ADJ.	VR5 (PAL S/H)
TAPE	—
INPUT	HD SDI IN: 1080/50I Color Bar signal SD REF IN: 625/50I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	$T = 1.2 \mu \pm 0.1 \mu \text{ sec}$

1. Set system to 1080/50I mode.
2. Adjust VR5 (PAL S/H) so that phase difference T between sample pulse at TP21 and pulse signal at TP7 is within the specification.

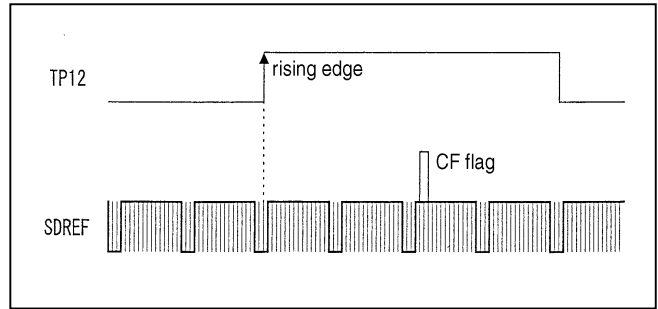


NOTE: Disconnect HD REF IN (OUT REF = AUTO).

9-18.PAL CF Phase Adjustment (1)

BOARD	PB PROC (L2)
TP	TP12 SD REF IN THOU OUT
ADJ.	VR7 (PAL CF)
TAPE	—
INPUT	HD SDI IN: 1080/50I Color Bar signal SD REF IN: 625/50I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	Rising edge of pulse at TP12 is located one frame before compared with CF flag on SD REF IN signal.

1. Set system to 1080/50I mode.
2. Input same signal as SD REF IN input signal (SD REF IN THOU) into oscilloscope.
3. Turn VR7 fully counterclockwise.
4. Turn VR7 clockwise and adjust it so that rising edge at TP12 is located one frame before compared with CF flag on SD REF IN signal.

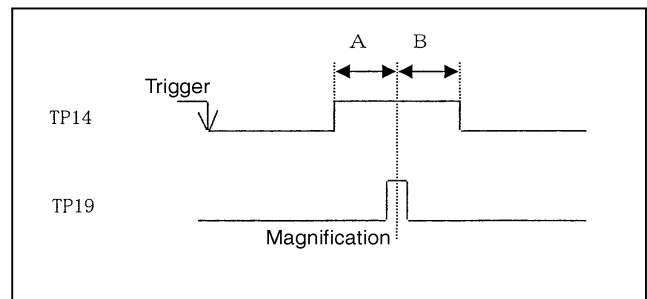


NOTE: Disconnect HD REF IN (OUT REF = AUTO).

9-19.PAL CF Phase Adjustment (2)

BOARD	PB PROC (L2)
TP	TP14, TP19
ADJ.	VR7 (PAL S/H)
TAPE	—
INPUT	HD SDI IN: 1080/50I Color Bar signal SD REF IN: 625/50I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	Pulse of TP19 comes to the center of high level portion at TP14. (A = B)

1. Set system to 1080/50I mode.
2. Adjust VR7 so that position of pulse at TP14 is within the specification.

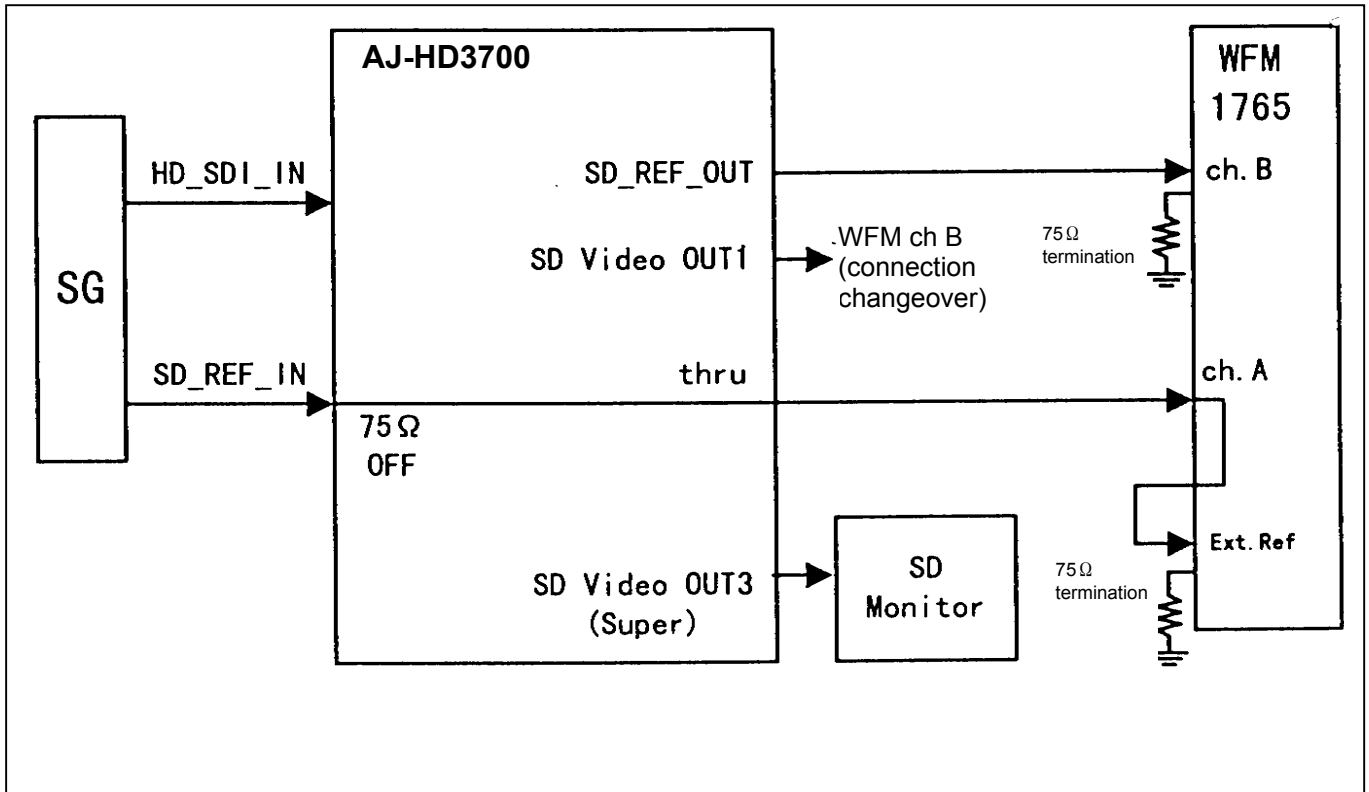


NOTE:

It is not preferable to turn VR too much. It needs to readjust PAL CF Phase Adjustment (1). Because the reversion of the CF flag.

9-20. Connections (4)

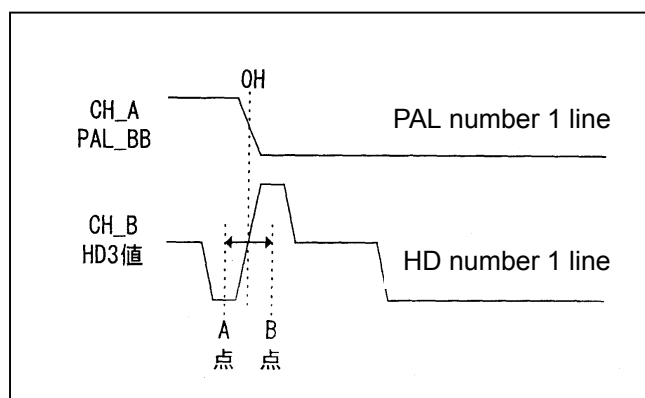
The connections shown below apply to the adjustment procedure in items 9-21 to 9-23.



9-21.SD REF (PAL) SYS H Adjustment

BOARD	PB PROC (L2)
TP	SD REF OUT SD REF IN THOU OUT
ADJ.	VR3 (PAL H PHASE)
TAPE	—
INPUT	HD SDI IN: 1080/50I Color Bar signal SD REF IN: 625/50I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope, WFM
SPEC.	H phase difference of SD REF OUT is within $\pm 200\text{nsec}$ against SD REF IN

1. Set system to 1080/50I mode.
2. Input same signal as SD REF IN (SD REF IN THOU OUT) to CH A and EXT REF input terminal on WFM. And input SD REF OUT signal into CH B on WFM.
3. Set WFM to EXT REF mode and line up phase of burst vector on CH A.
4. Set WFM to CH B and adjust VR3 so that H phase is same as that of CH A and B.
5. Since H phase will vary intermittently at this time, use center of point A and B to line up H phase as shown in the figure.



9-22.SD SYS (PAL) SYS SC Adjustment

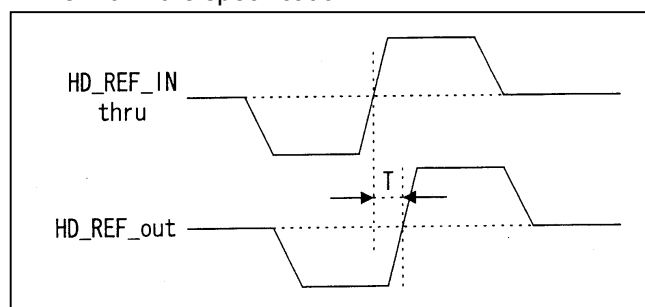
BOARD	PB PROC (L2)
TP	VIDEO OUT 1 SD REF IN THOU OUT
ADJ.	VR18 (PAL VPHASE)
TAPE	—
INPUT	HD SDI IN: 1080/50I Color Bar signal SD REF IN: 625/50I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope, WFM
SPEC.	VIDEO OUT 1 SC phase difference is within $\pm 30^\circ$ against SD REF IN

1. Set system to 1080/50I mode.
2. Input same signal as SD REF IN (SD REF IN THOU OUT) to CH A and EXT REF input terminal on WFM. And input VIDEO OUT 1 signal into CH B on WFM.
3. Set WFM to EXT REF mode and line up phase of burst vector on CH A.
4. Adjust the VR18 so that CH B burst phase matches CH A burst phase.

9-23.HD REF SYS H Adjustment

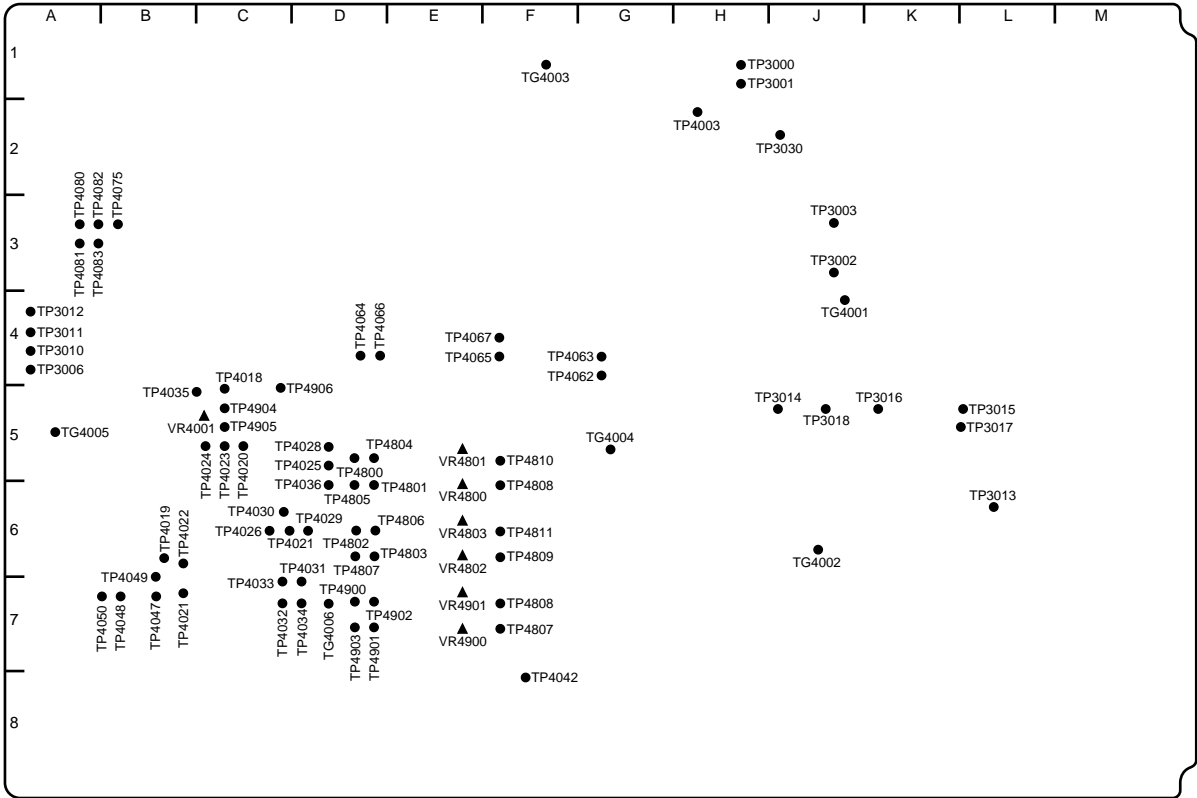
BOARD	PB PROC (L2)
TP	HD REF OUT HD REF IN THOU OUT
ADJ.	VR11 (NTSC CF)
TAPE	—
INPUT	HD SDI IN: 1080/50I Color Bar signal SD REF IN: 625/50I Black Burst signal
MODE	EE, EJECT
M.EQ.	Oscilloscope
SPEC.	$T = 0 \pm 50\text{nsec}$

1. Set system to 1080/50I mode.
2. Adjust VR11 (NTSC CF) so that phase difference T between HD REF IN THOU OUT and HD REF OUT is within the specification.



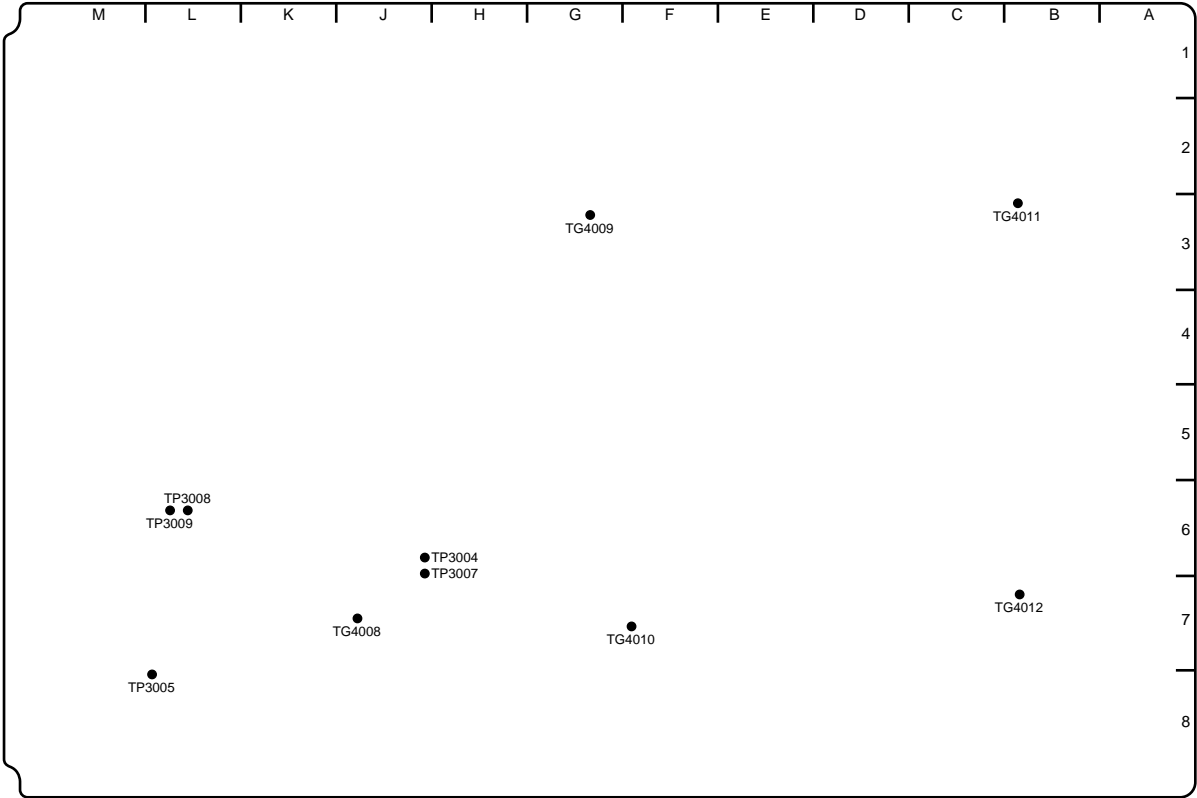
10. LOCATION OF TEST POINTS & CONTROLS

L1:D5 REC PB P.C.BOARD



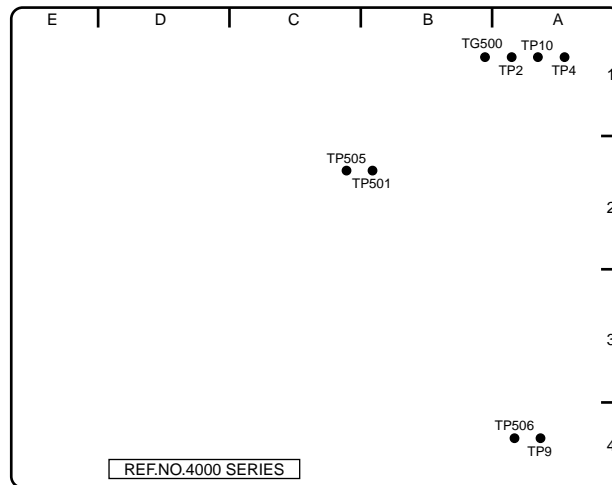
(COMPONENT SIDE)

L1:D5 REC PB P.C.BOARD



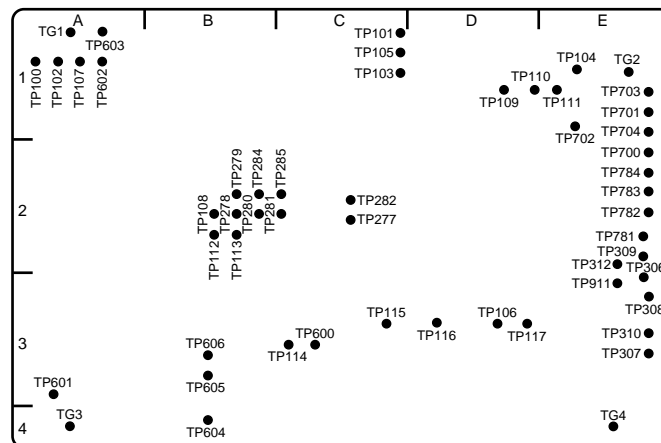
(FOIL SIDE)

L1:PCM PC SUB P.C.BOARD



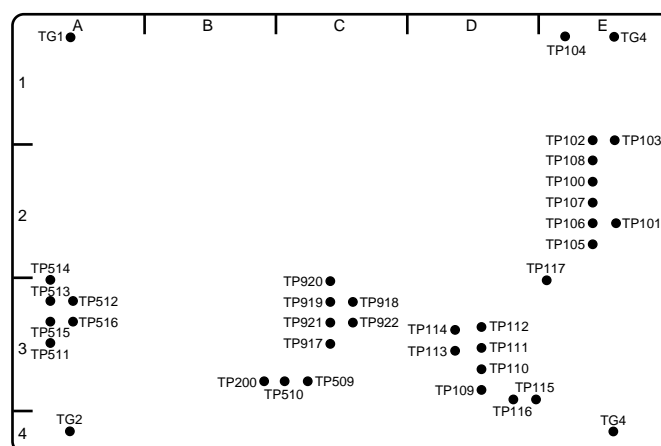
(FOIL SIDE)

L1:REC SUB P.C.BOARD



(COMPONENT SIDE)

L1:PB SUB P.C.BOARD

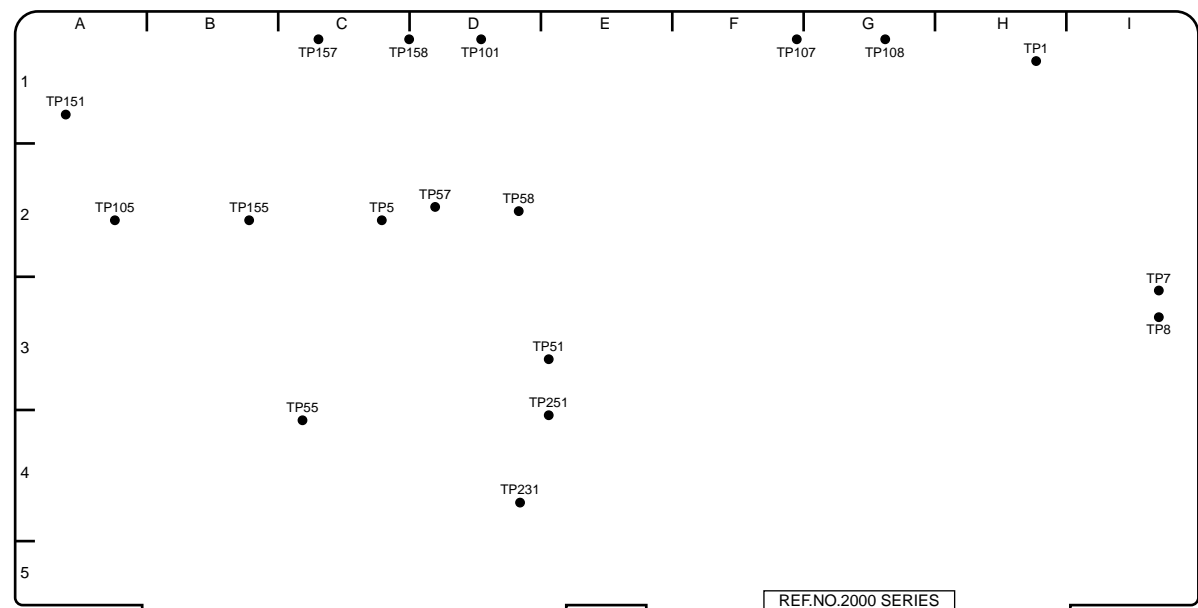


(COMPONENT SIDE)

Phylogenetic tree showing the relationships between various TP and TG sequences. The tree is rooted at the bottom (TG3) and branches upwards. The y-axis represents genetic distance from 0 to 8. The x-axis is divided into eight groups: A, B, C, D, E, F, G, and H. Group A contains TP817, TP807, TP803, TP404, TP402, TP305, TP11, TP6, and TP5. Group B contains TP14, TP13, and TP7. Group C contains TP811, TP800, TP601, TP281, and TP282. Group D contains TP952, TP954, TP951, and TP953. Group E contains TP911, TP910, TP907, TP906, TP905, TP908, and TP909. Group F contains TP905, TP902, TP906, TP901, and TP904. Group G contains TP501, TP502, TP503, and TP903. Group H contains TP102, TP104, TP106, TP101, TP103, and TP105. Two boxes labeled 'REF.NO.2000 SERIES' and 'REF.NO.6000 SERIES' are present. A dashed line separates the two series. The tree shows that sequences within a group are highly similar, while sequences between groups are more divergent.

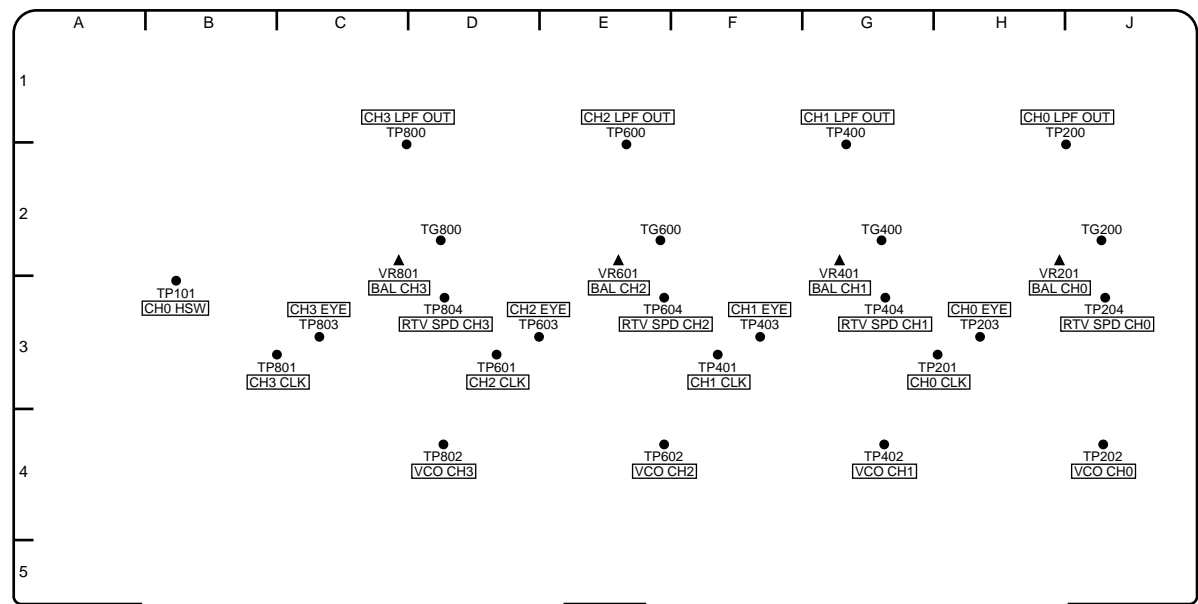
EAD-52

S0:DRIVE P.C.BOARD



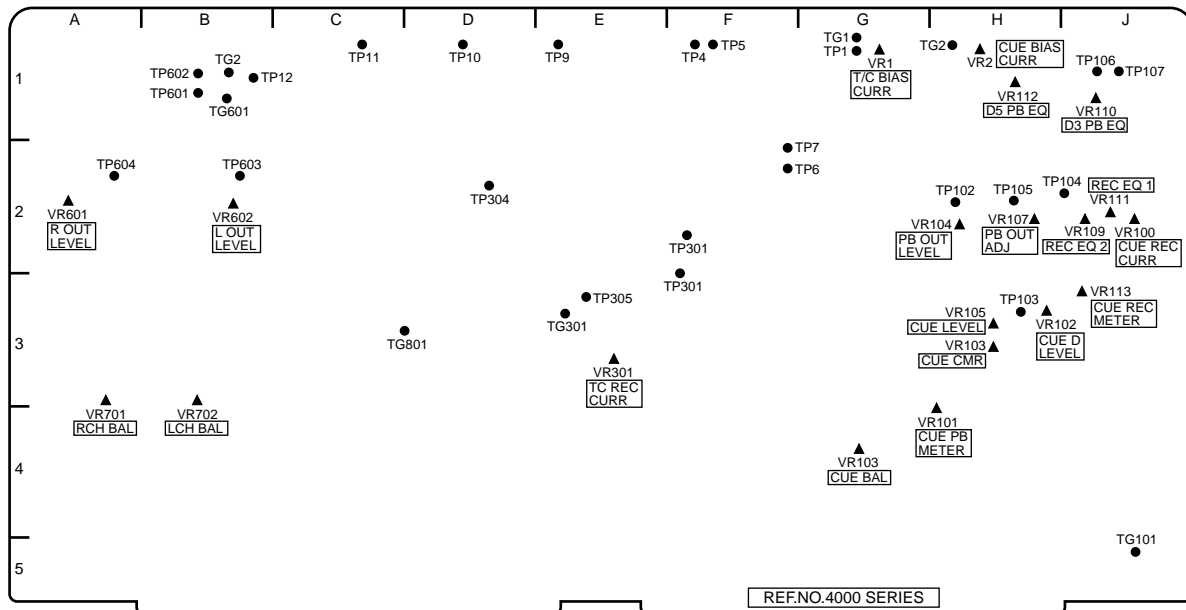
(COMPONENT SIDE)

S1:EQ P.C.BOARD



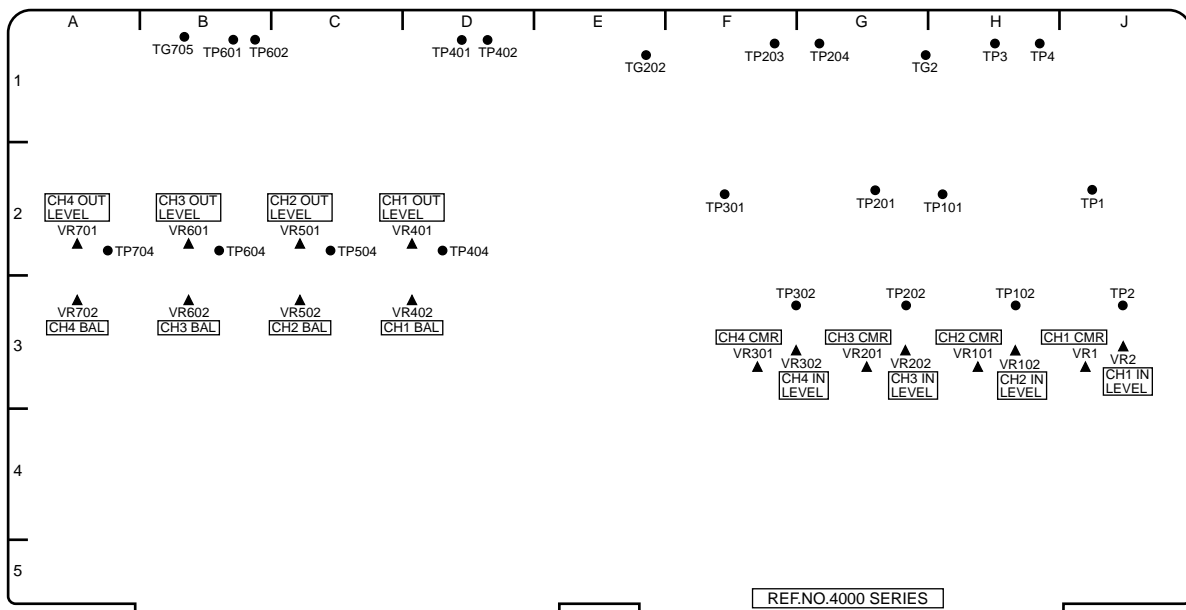
(COMPONENT SIDE)

S2:CUE/TC P.C.BOARD



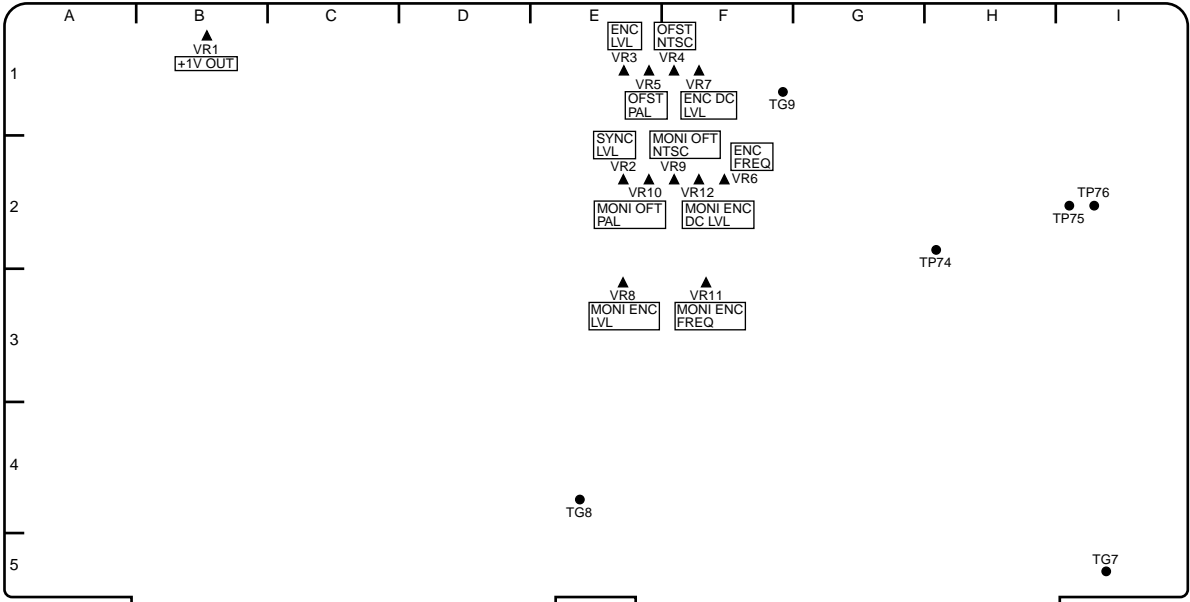
(COMPONENT SIDE)

S3:A ADDA P.C.BOARD



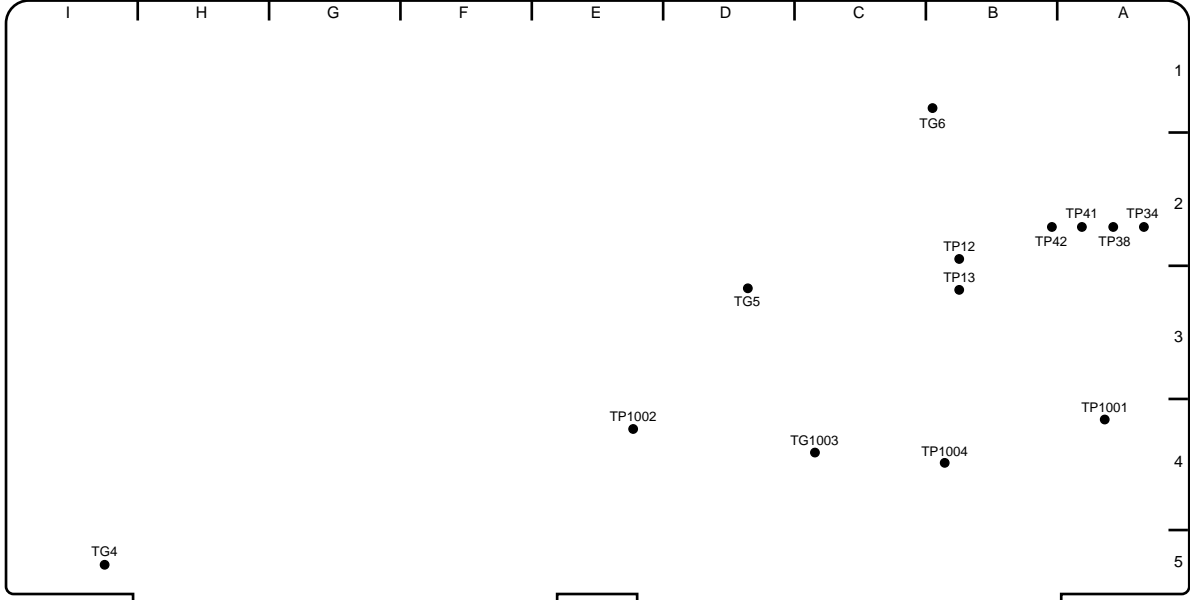
(COMPONENT SIDE)

S4:SDI OUT P.C.BOARD



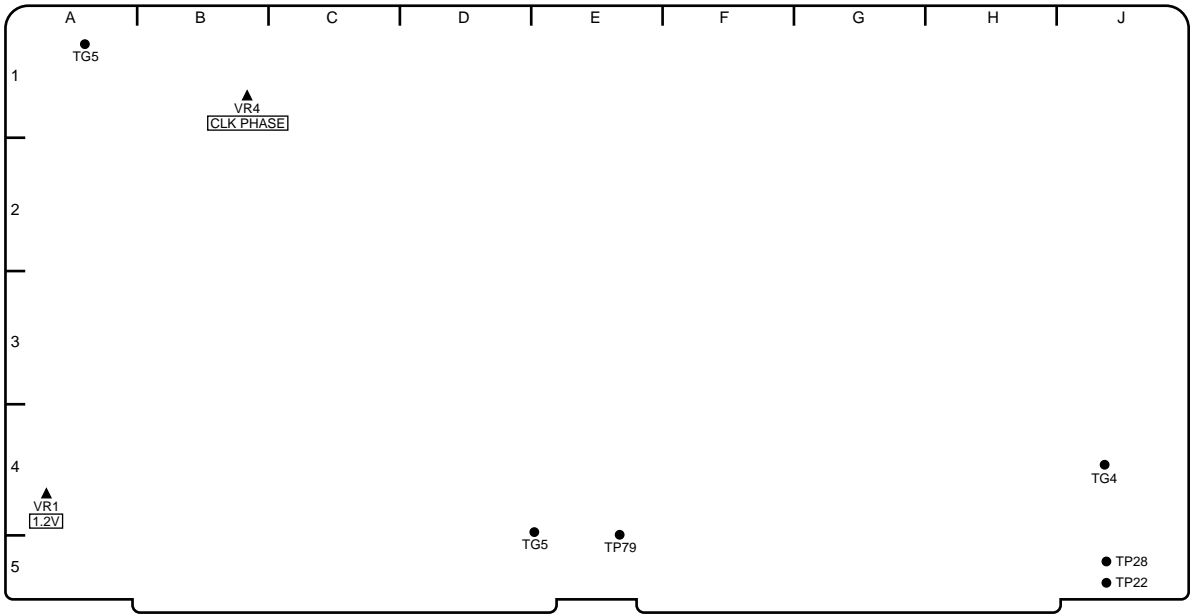
(COMPONENT SIDE)

S4:SDI OUT P.C.BOARD



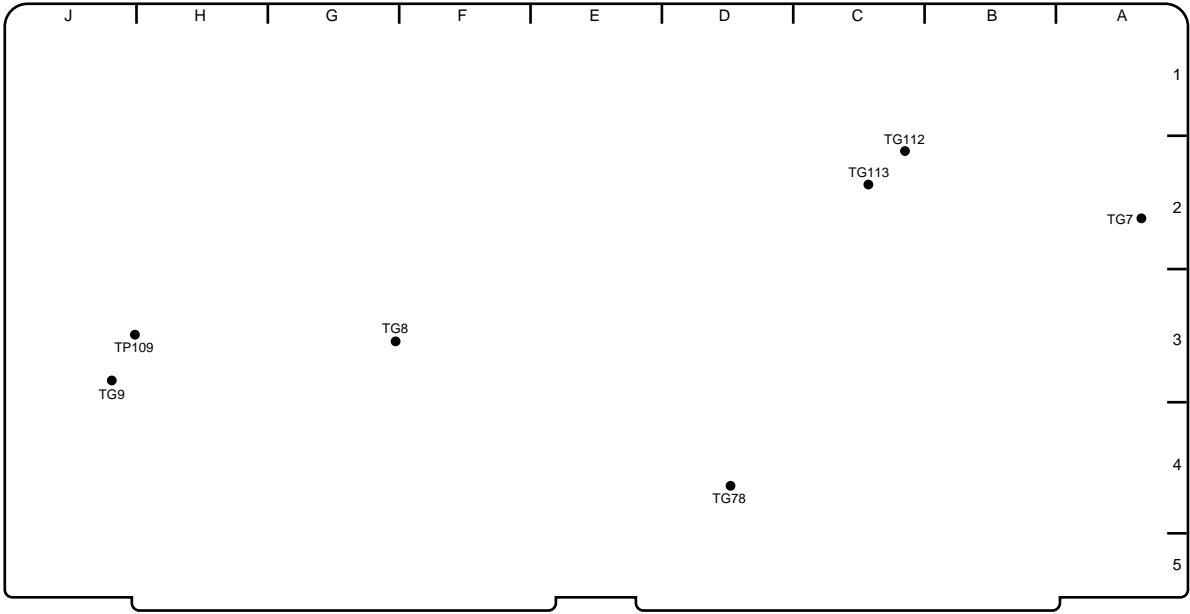
(FOIL SIDE)

S5:SDI IN P.C.BOARD



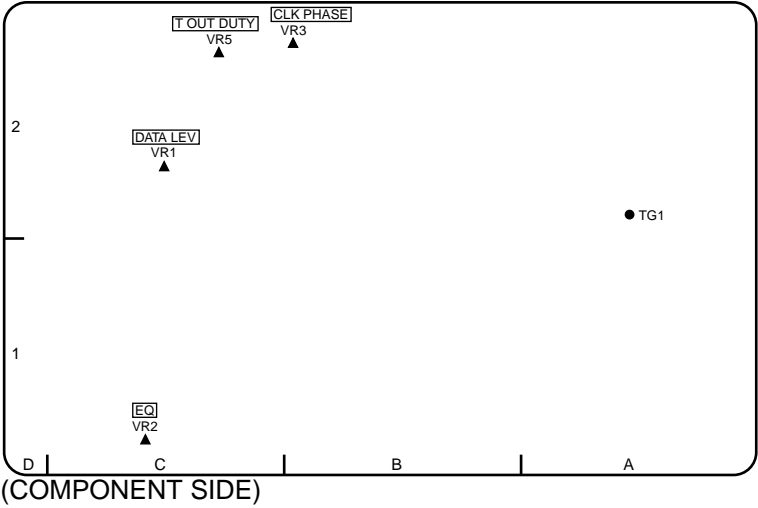
(COMPONENT SIDE)

S5:SDI IN P.C.BOARD

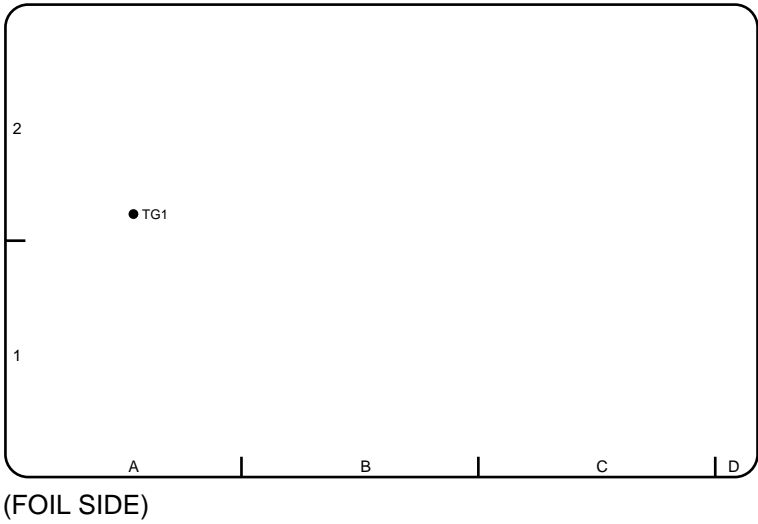


(FOIL SIDE)

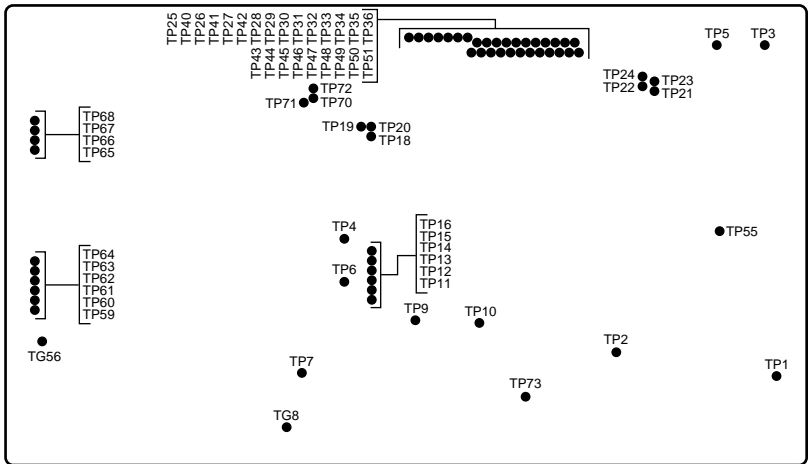
S5:HD SDI RX P.C.BOARD



S5:HD SDI RX P.C.BOARD

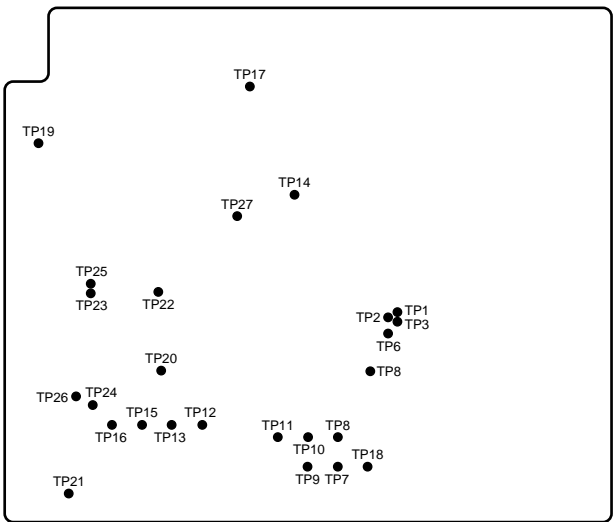


S5:RATE CON P.C.BOARD



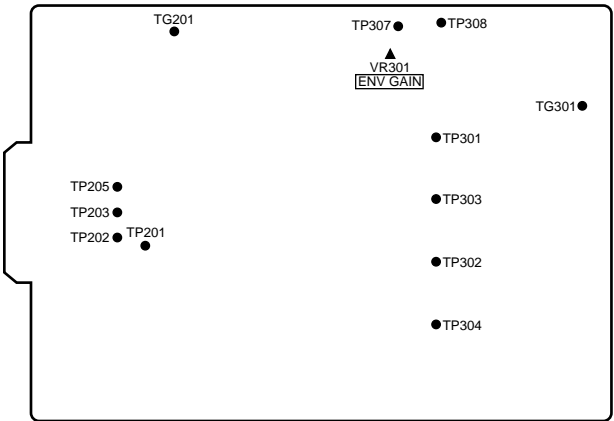
(COMPONENT SIDE)

S5:META SUB P.C.BOARD



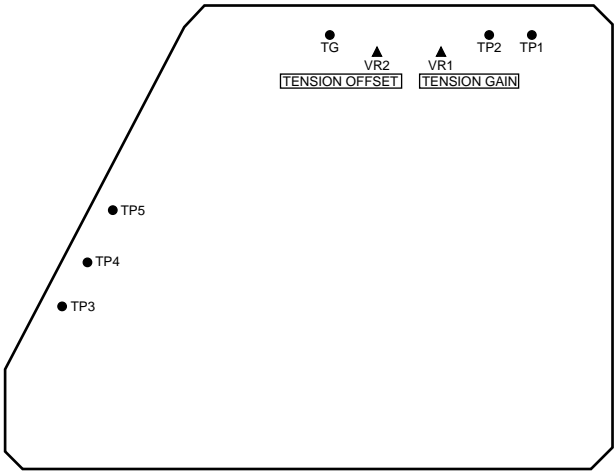
(COMPONENT SIDE)

REC AMP P.C.BOARD



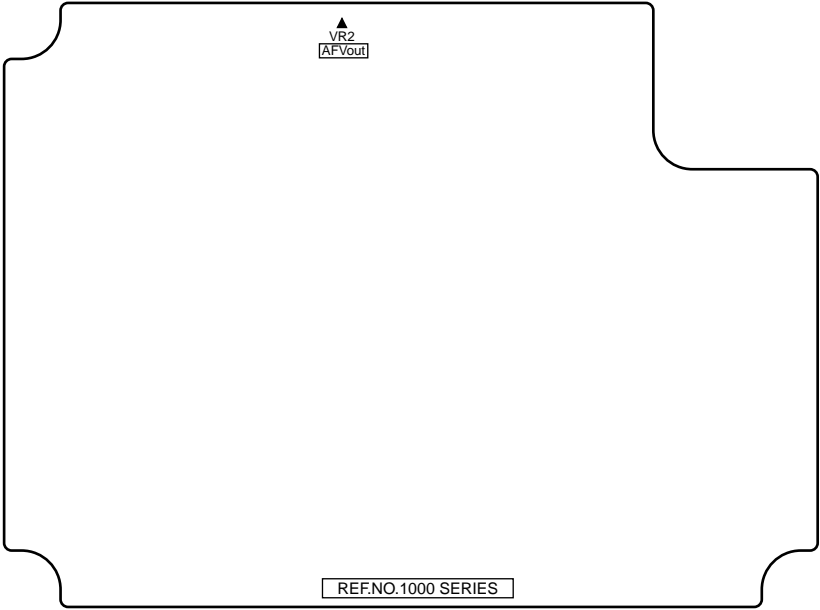
(COMPONENT SIDE)

SERVO CNTL P.C.BOARD



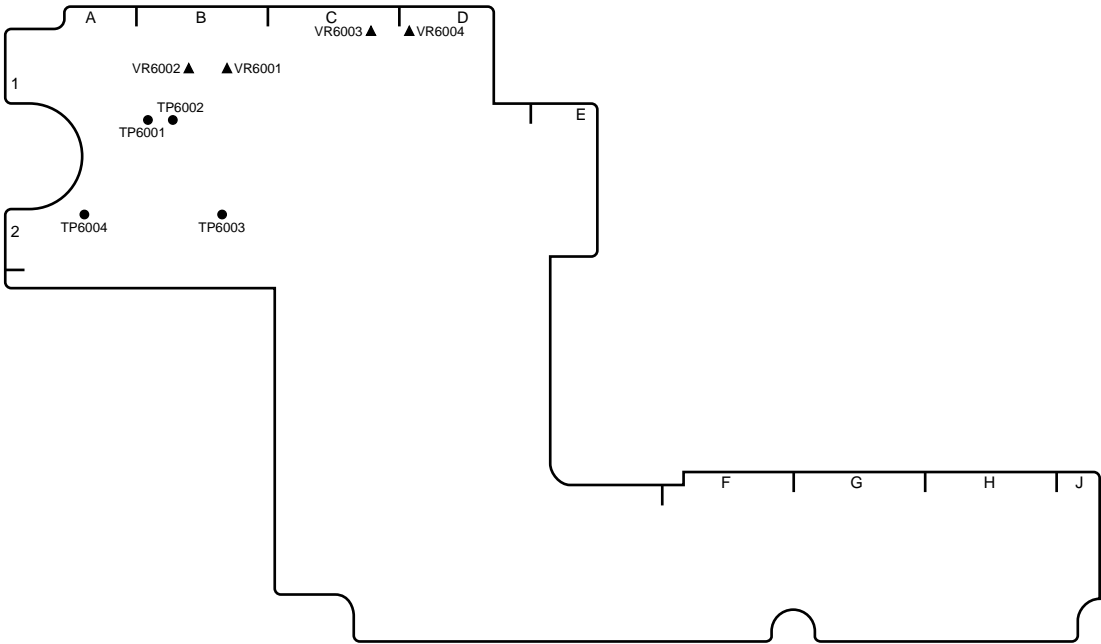
(COMPONENT SIDE)

POWER1 P.C.BOARD



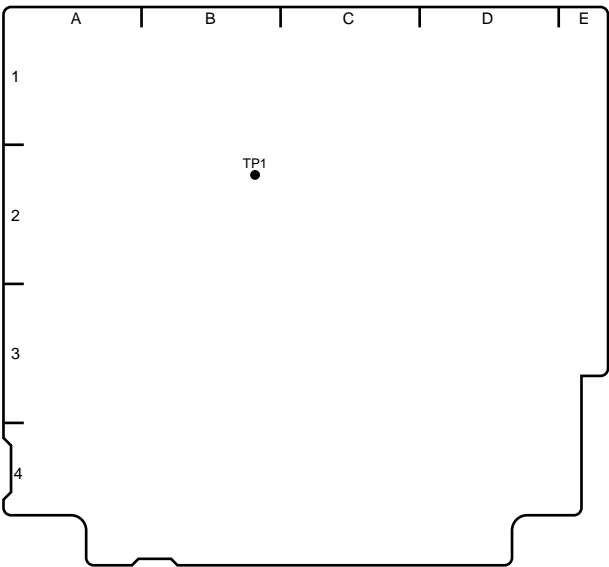
(COMPONENT SIDE)

FRONT CNTL1 P.C.BOARD



(COMPONENT SIDE)

FRONT CNTL2 P.C.BOARD



(COMPONENT SIDE)

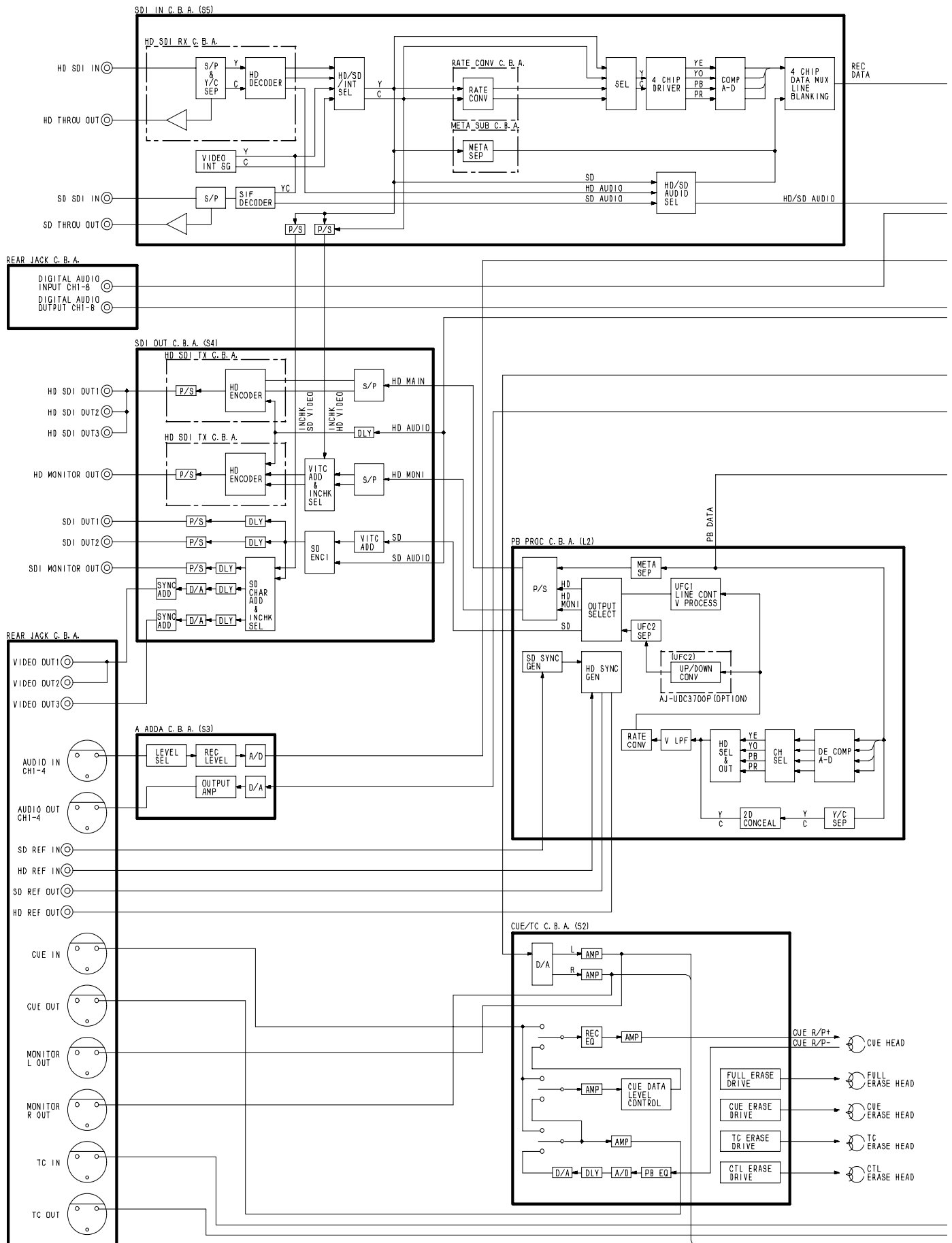
SECTION 5

BLOCK DIAGRAMS

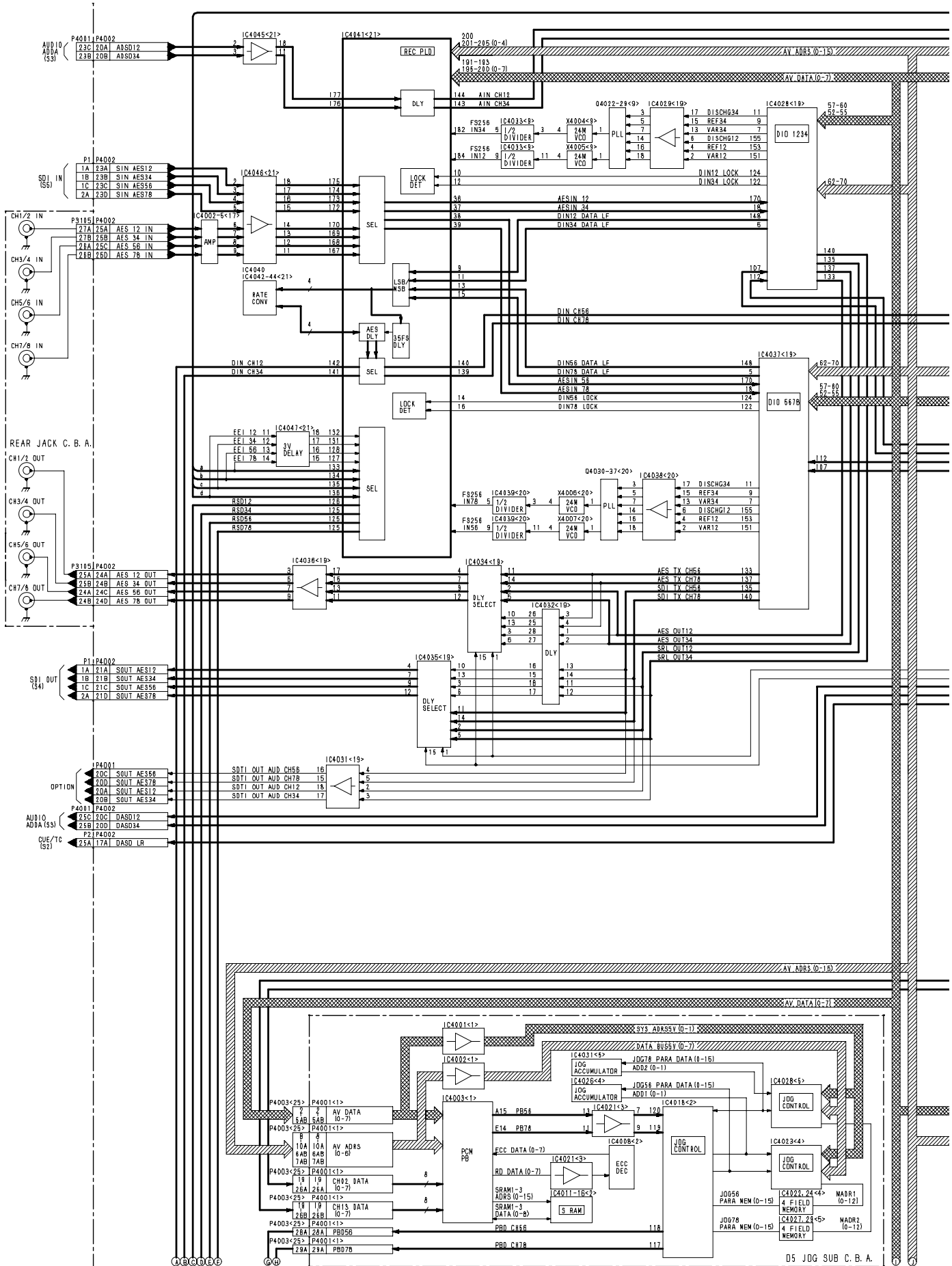
CONTENTS

OVERALL BLOCK DIAGRAM	BLK-1
AUDIO PROCESS (L1) BLOCK DIAGRAM.....	BLK-3
HD ENCODE & REC PB (D5 REC PB) (L1) BLOCK DIAGRAM.....	BLK-5
SYNC GEN (HD PROCESS) (L2) BLOCK DIAGRAM	BLK-7
HD DECORDER & V PROCESS (L2) BLOCK DIAGRAM.....	BLK-9
FG AMP / CTL AMP / AT PRE AMP (M1 & S0) BLOCK DIAGRAM	BLK-11
MPU PERI (M1) BLOCK DIAGRAM.....	BLK-13
SYSCON / AV / TC (M1) BLOCK DIAGRAM	BLK-15
EQ (S1) BLOCK DIAGRAM	BLK-17
CUE/TC (S2) (1/2) BLOCK DIAGRAM.....	BLK-19
CUE/TC (S2) (2/2) BLOCK DIAGRAM.....	BLK-21
A ADDA (S3) BLOCK DIAGRAM.....	BLK-23
SDI OUT (S4) BLOCK DIAGRAM.....	BLK-25
SDI IN (S5) BLOCK DIAGRAM.....	BLK-27
REC AMP BLOCK DIAGRAM.....	BLK-29
POWER (POWER1 & 2) BLOCK DIAGRAM	BLK-31
AJ-UDC3700P UP_DOWN CONVERTER BLOCK DIAGRAM (option)	BLK-33

OVERALL BLOCK DIAGRAM



AUDIO PROCESS (L1) BLOCK DIAGRAM

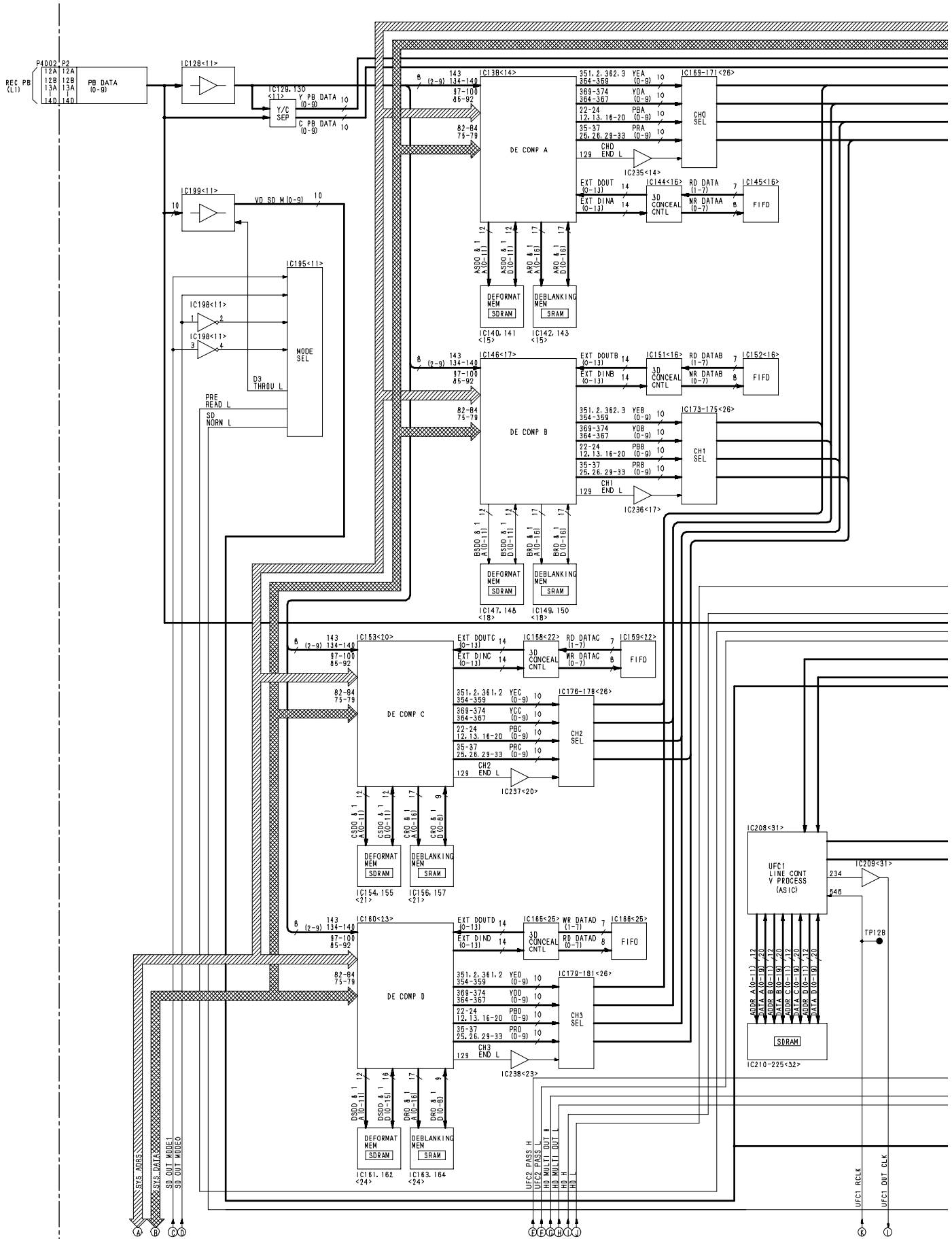


BLK-3

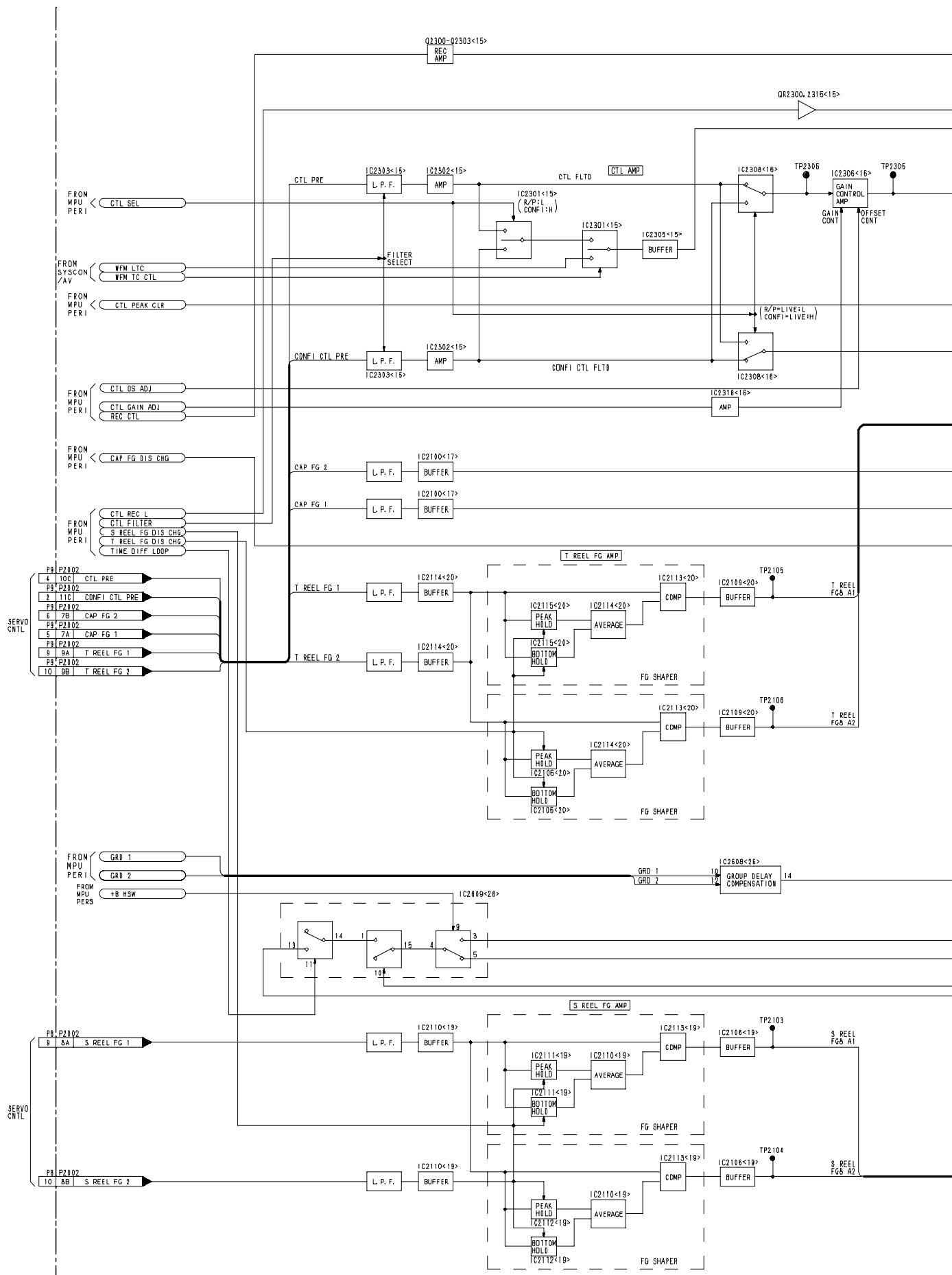
[illegible]

BLK-8

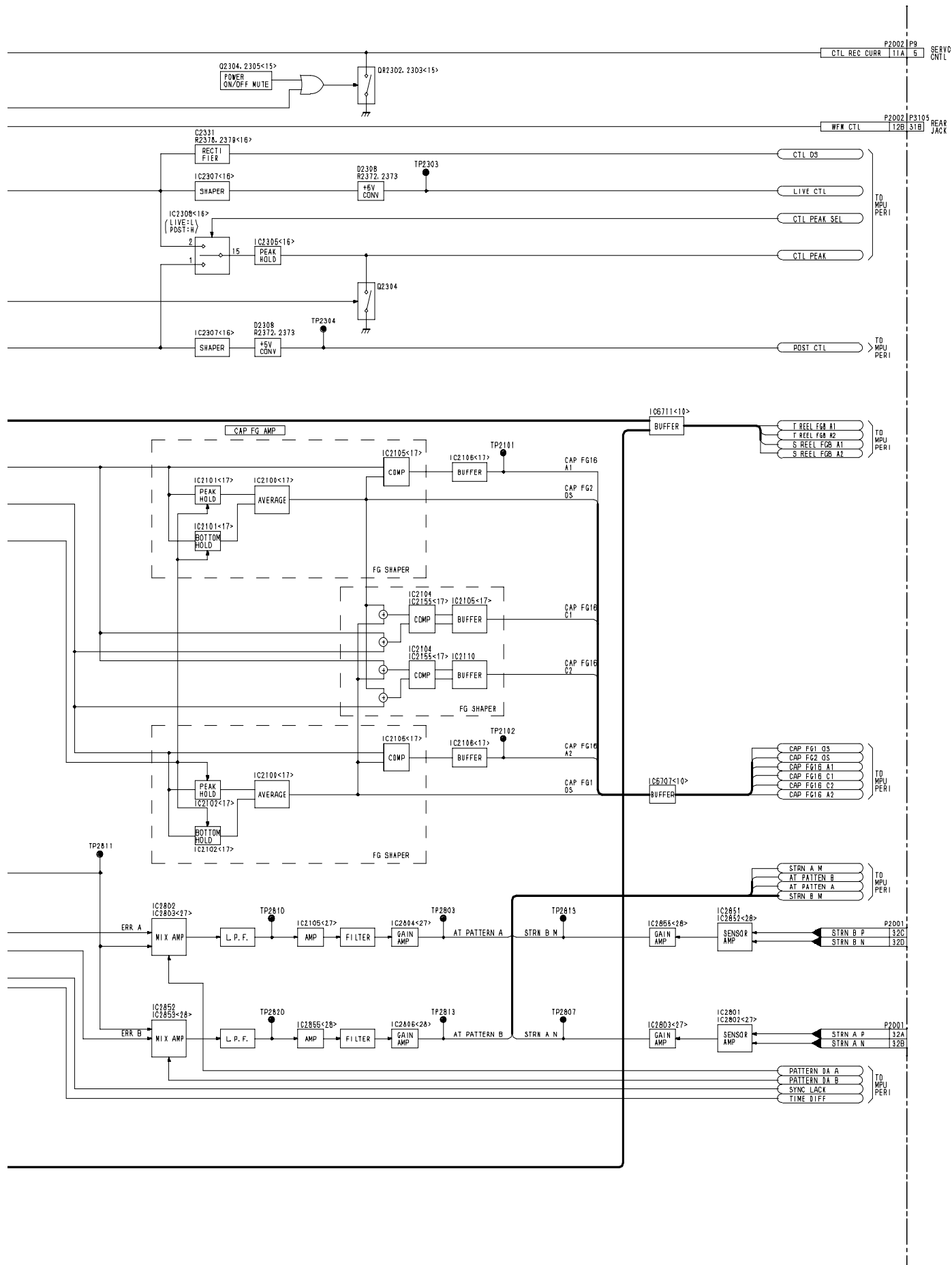
HD DECORDER & V PROCESS (L2) BLOCK DIAGRAM



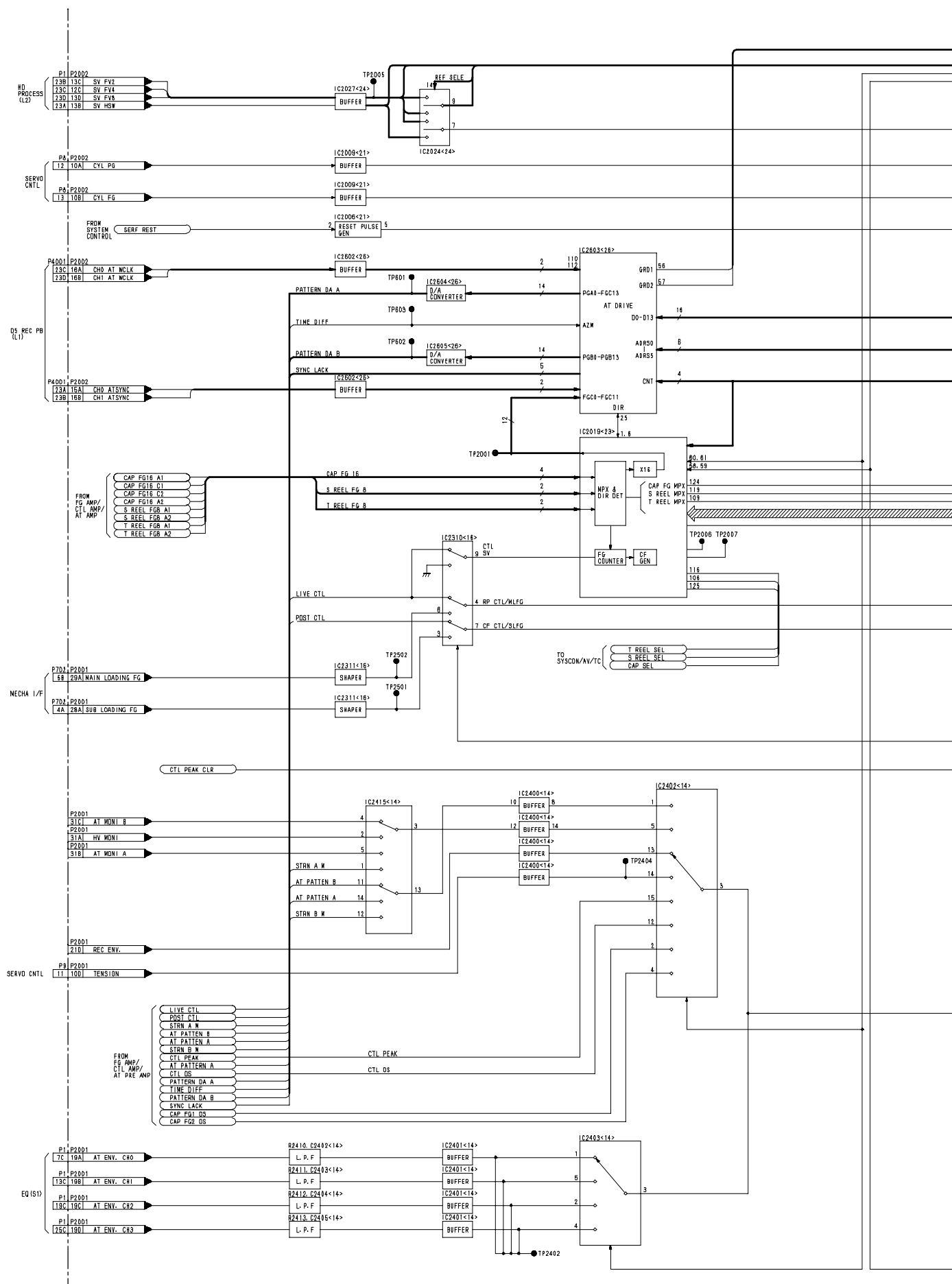
FG AMP / CTL AMP / AT PRE AMP (M1 & S0) BLOCK DIAGRAM



FG AMP / CTL AMP / AT PRE AMP (M1 & S0) BLOCK DIAGRAM



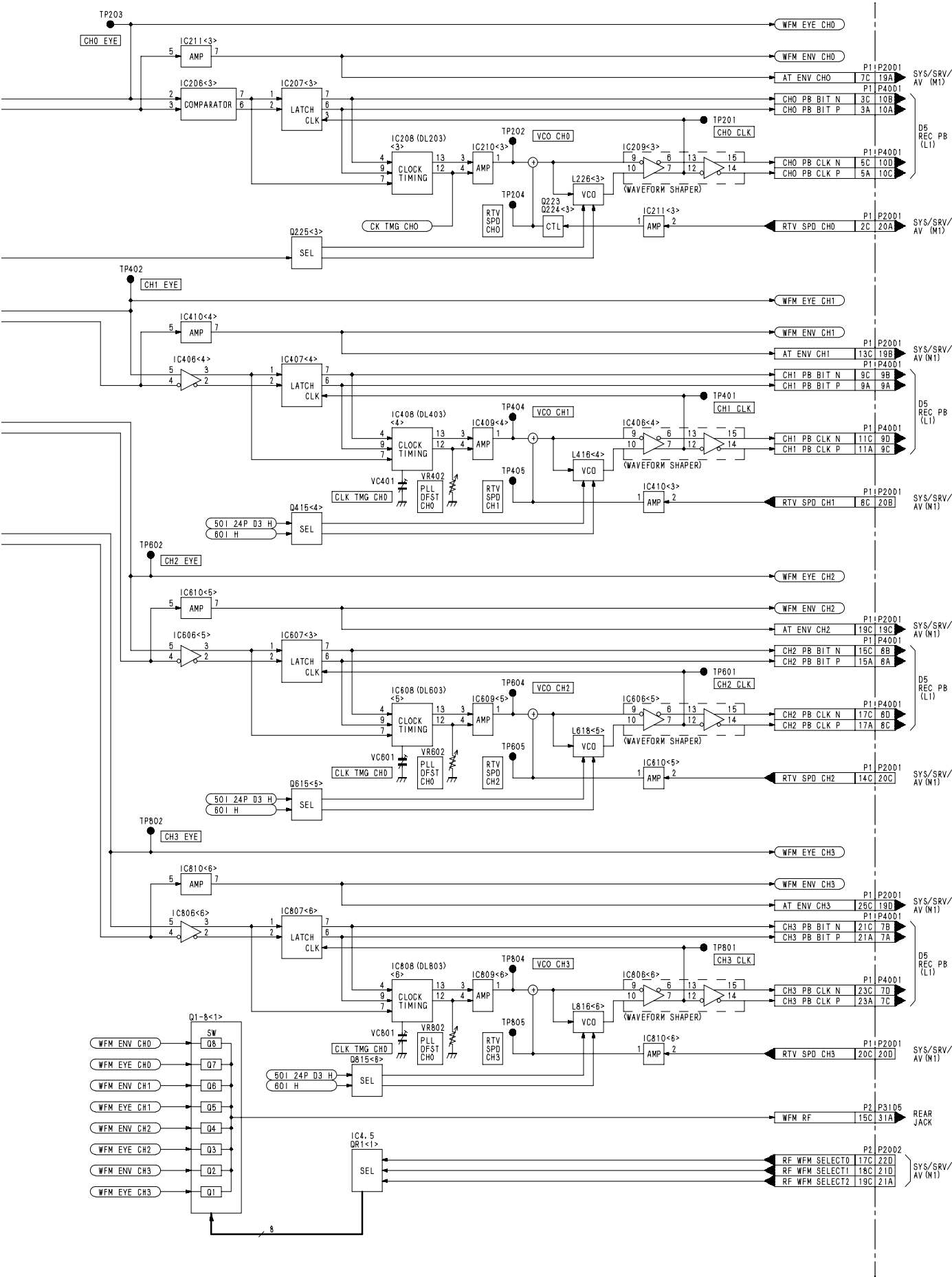
MPU PERI (M1) BLOCK DIAGRAM



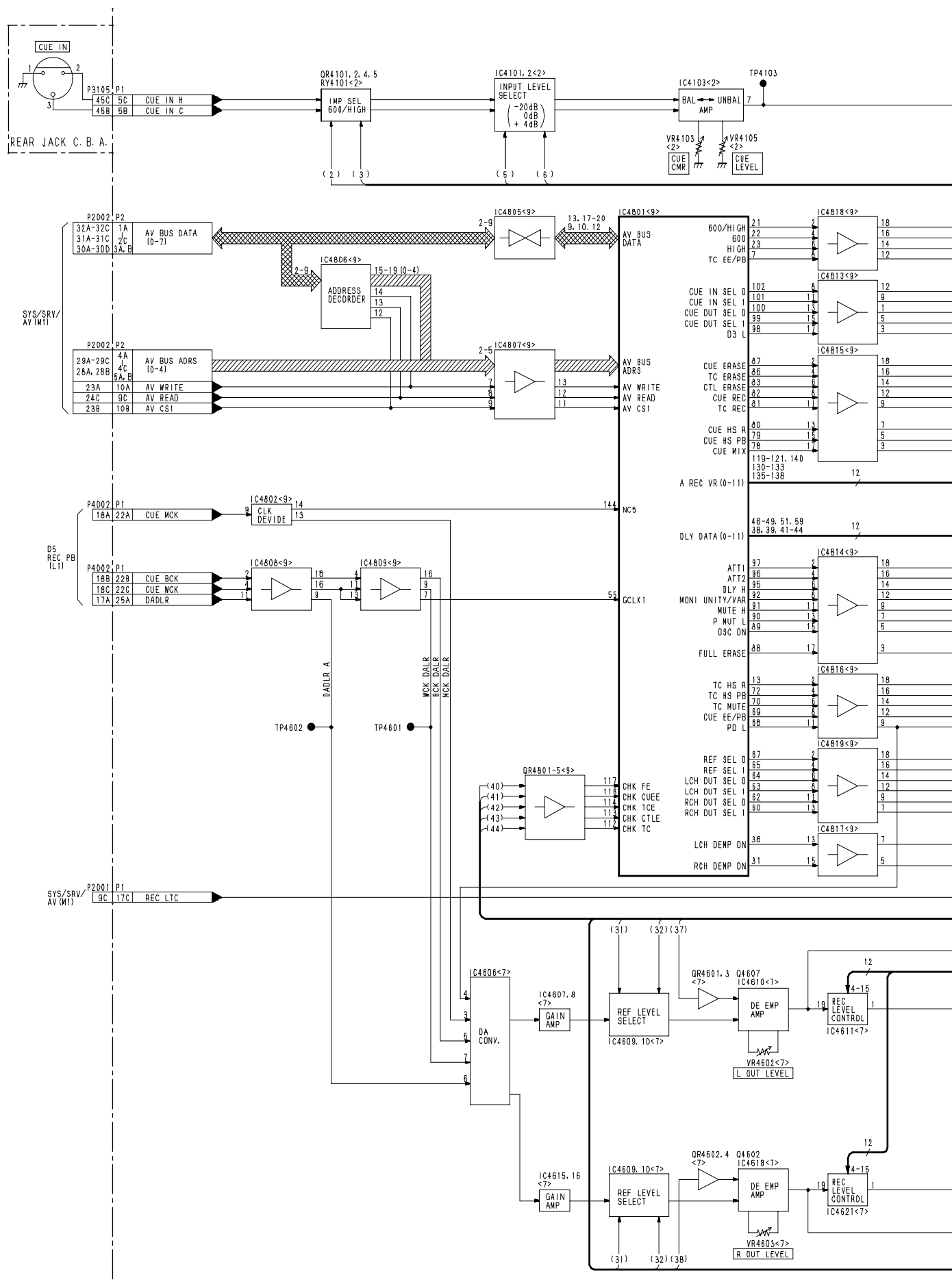
The diagram illustrates a 3-channel audio system architecture. It is organized into several main sections:

- Input Section:** Features three input channels (P200, P2002, P600) and a digital input section (P2001) for DA DATA, DA CLK, and DA LD1. The digital input section is connected to a DA (Digital-to-Analog) converter block.
- Channel Processing:** Each channel (CH0, CH1, CH2) follows a similar path:
 - Head Amp:** The input signal is amplified by a head amp (e.g., IC200, 201 for CH0).
 - Phase Adjust:** The signal passes through a phase adjuster (e.g., D204, 205 for CH0).
 - Delay:** A delay unit (e.g., DL200<3> for CH0) is used to align the signals.
 - 15MHz Trap:** A 15MHz trap (e.g., FL200<3> for CH0) is used to filter out unwanted frequencies.
 - MAG CH0:** A magnitude control (e.g., Q209, L204<3>) is applied.
 - FREQ M CH0:** A frequency response control (e.g., IC202<3>) is applied.
 - FREQ H CH0:** A high-frequency response control (e.g., L207-212<3>) is applied.
 - ENV DET:** An envelope detector (e.g., Q217, 218) is used to detect the signal level.
 - BAL CH0:** A balance control (e.g., VR201) is applied.
- Output Section:** The processed signals are sent to the output section, which includes:
 - Phase:** Phase control signals (e.g., PHASE CH0, PHASE CH1, PHASE CH2).
 - MAG:** Magnitude control signals (e.g., MAG CH0, MAG CH1, MAG CH2).
 - FREQ:** Frequency control signals (e.g., FREQ H CH0, FREQ M CH0, FREQ H CH1, FREQ M CH1, FREQ H CH2, FREQ M CH2, FREQ H CH3, FREQ M CH3).
 - CK TMG:** Common timing signals (e.g., CK TMG CH0, CK TMG CH1, CK TMG CH2, CK TMG CH3).
- DA Section:** A digital-to-analog converter (DA) section with multiple DACs (e.g., IC101<2>, IC102<2>, IC103<2>, IC104<2>, IC105<2>, IC106<2>, IC107<2>, IC108<2>) and a clock/data input section (P2001) for DA DATA, DA CLK, and DA LD1.
- HSW GEN:** A high-speed waveform generator (HSW GEN) section with inputs for HSW4, HSW3, HSW2, and HSW1.

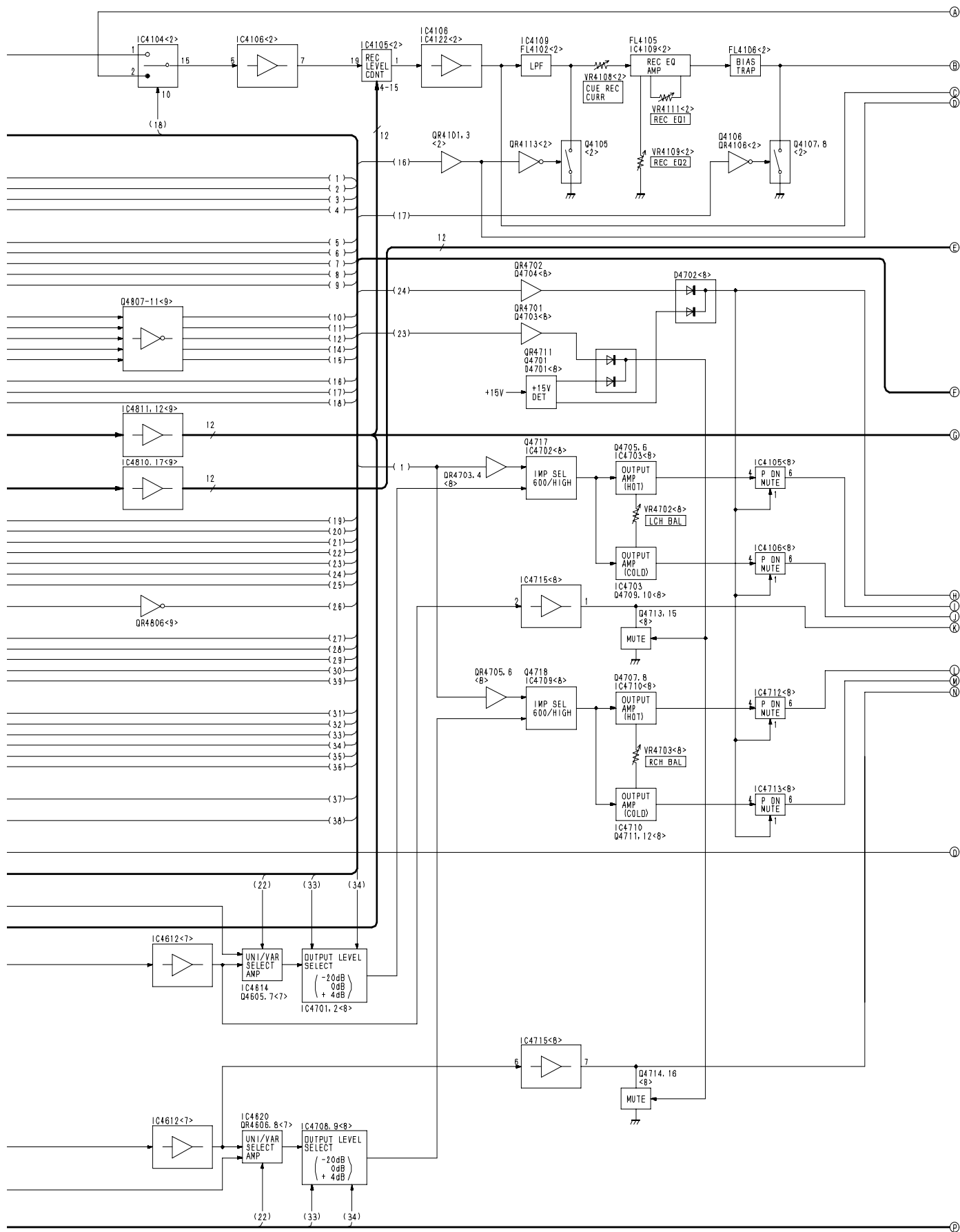
EQ (S1) BLOCK DIAGRAM



CUE / TC (S2) (1/2) BLOCK DIAGRAM



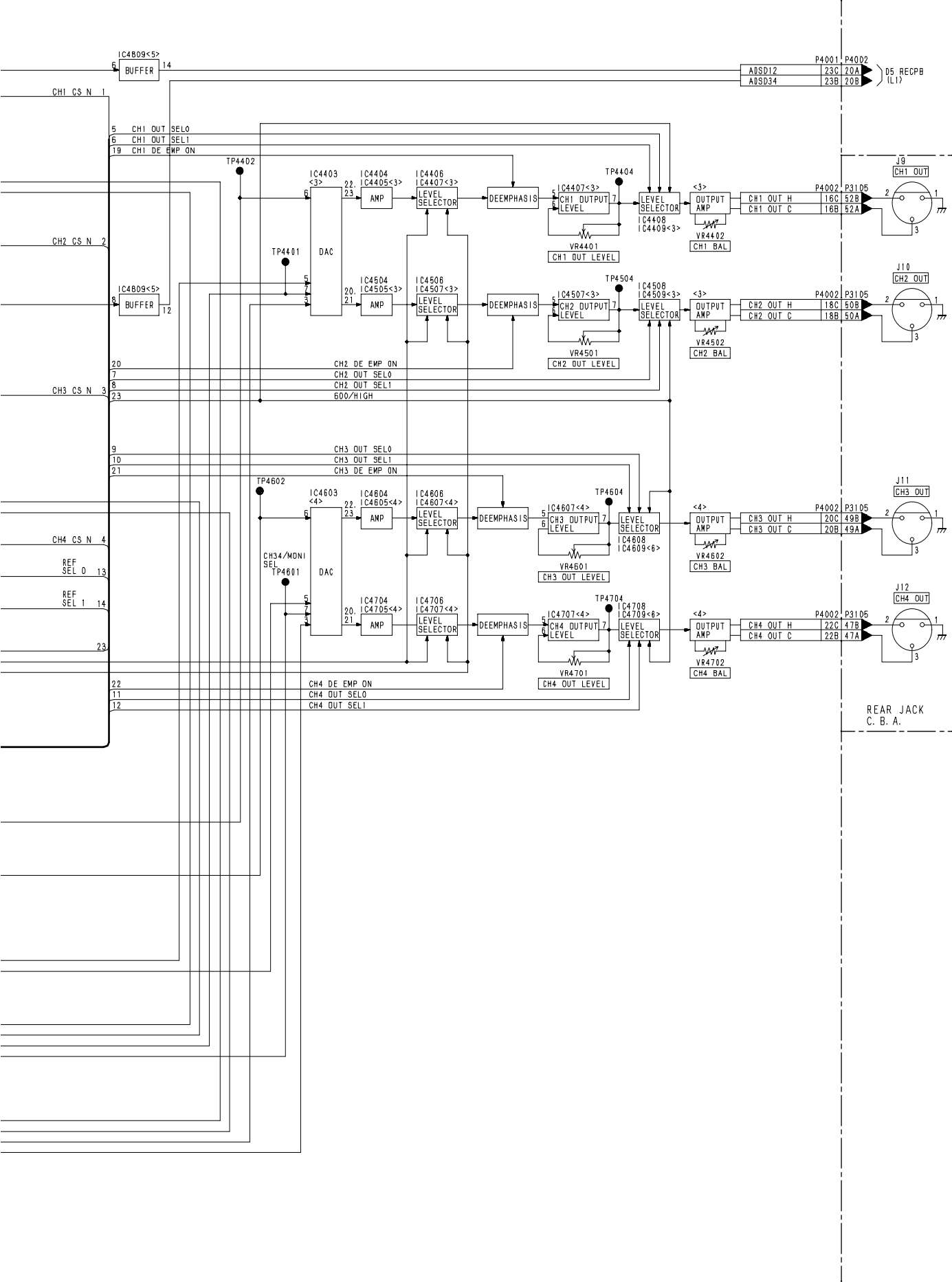
CUE / TC (S2) (1/2) BLOCK DIAGRAM



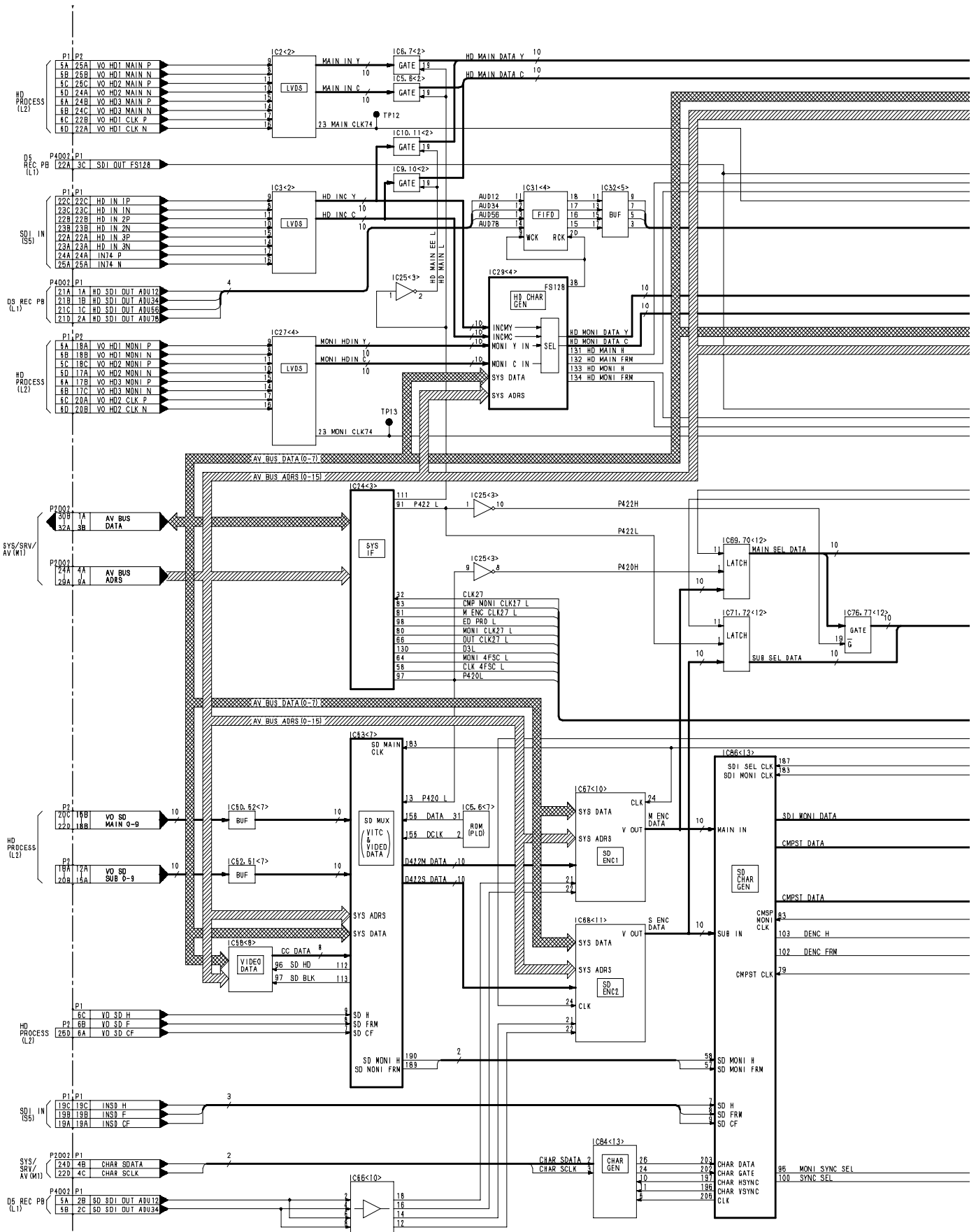
®



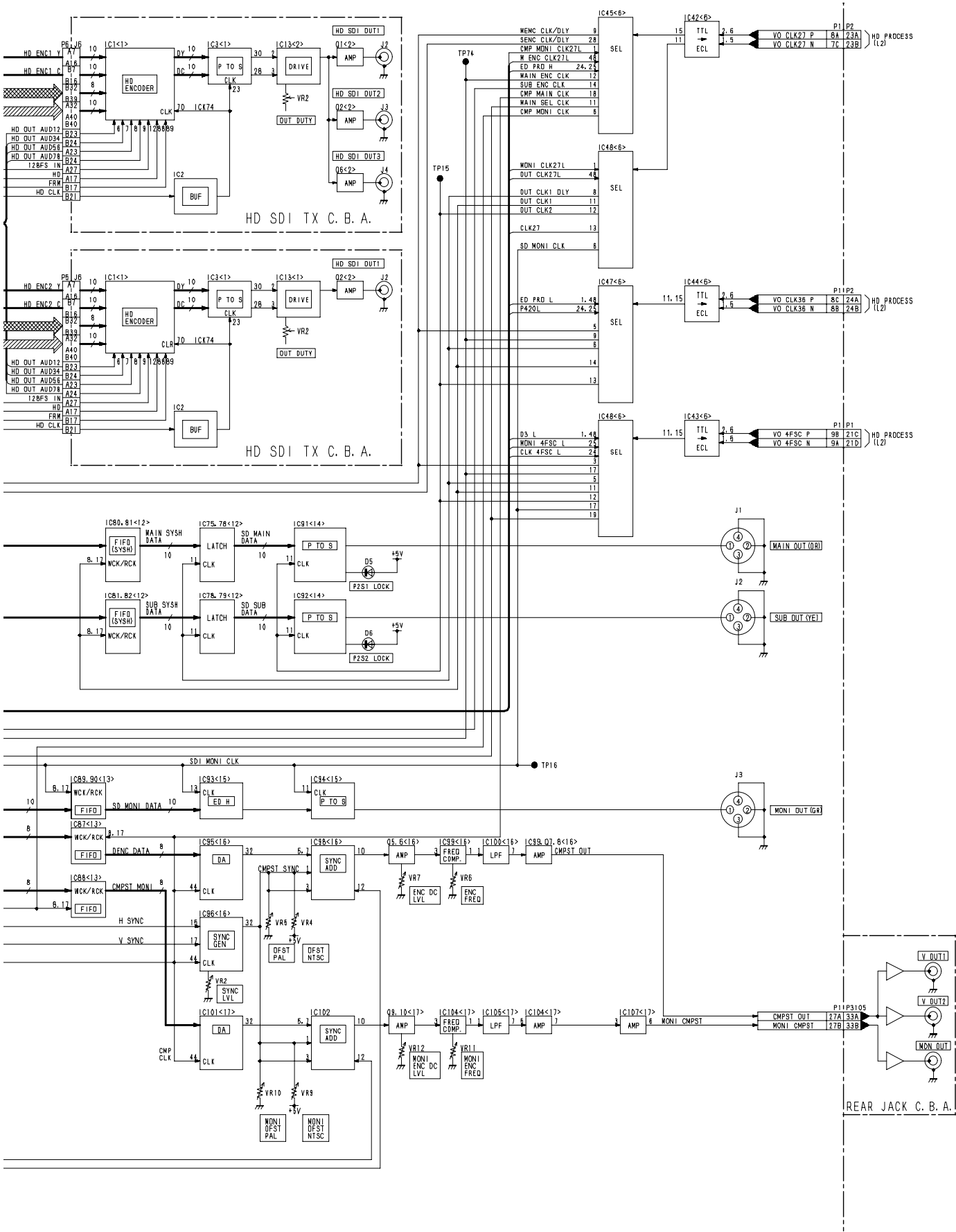
A ADDA (S3) BLOCK DIAGRAM



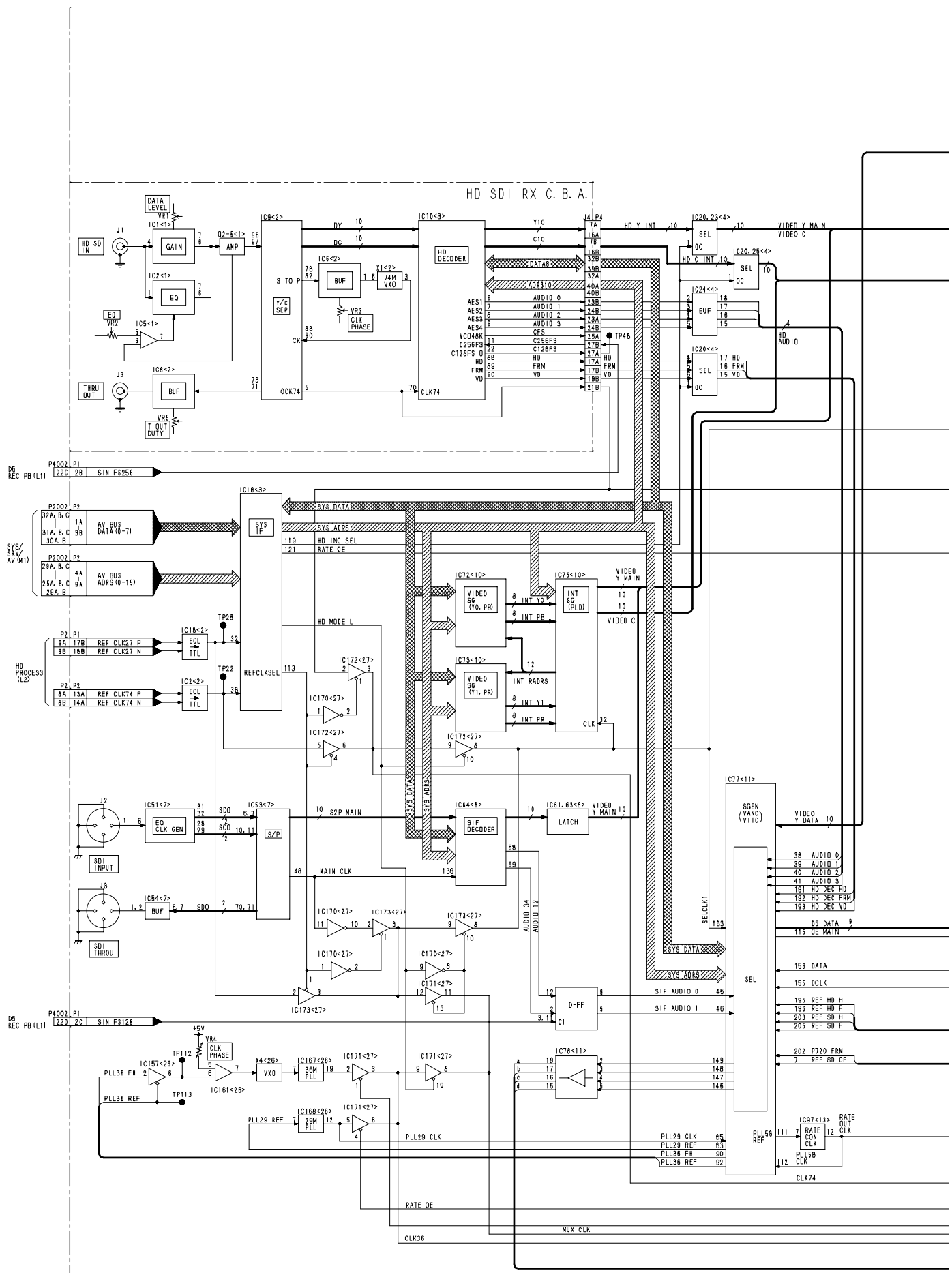
SDI OUT (S4) BLOCK DIAGRAM



SDI OUT (S4) BLOCK DIAGRAM

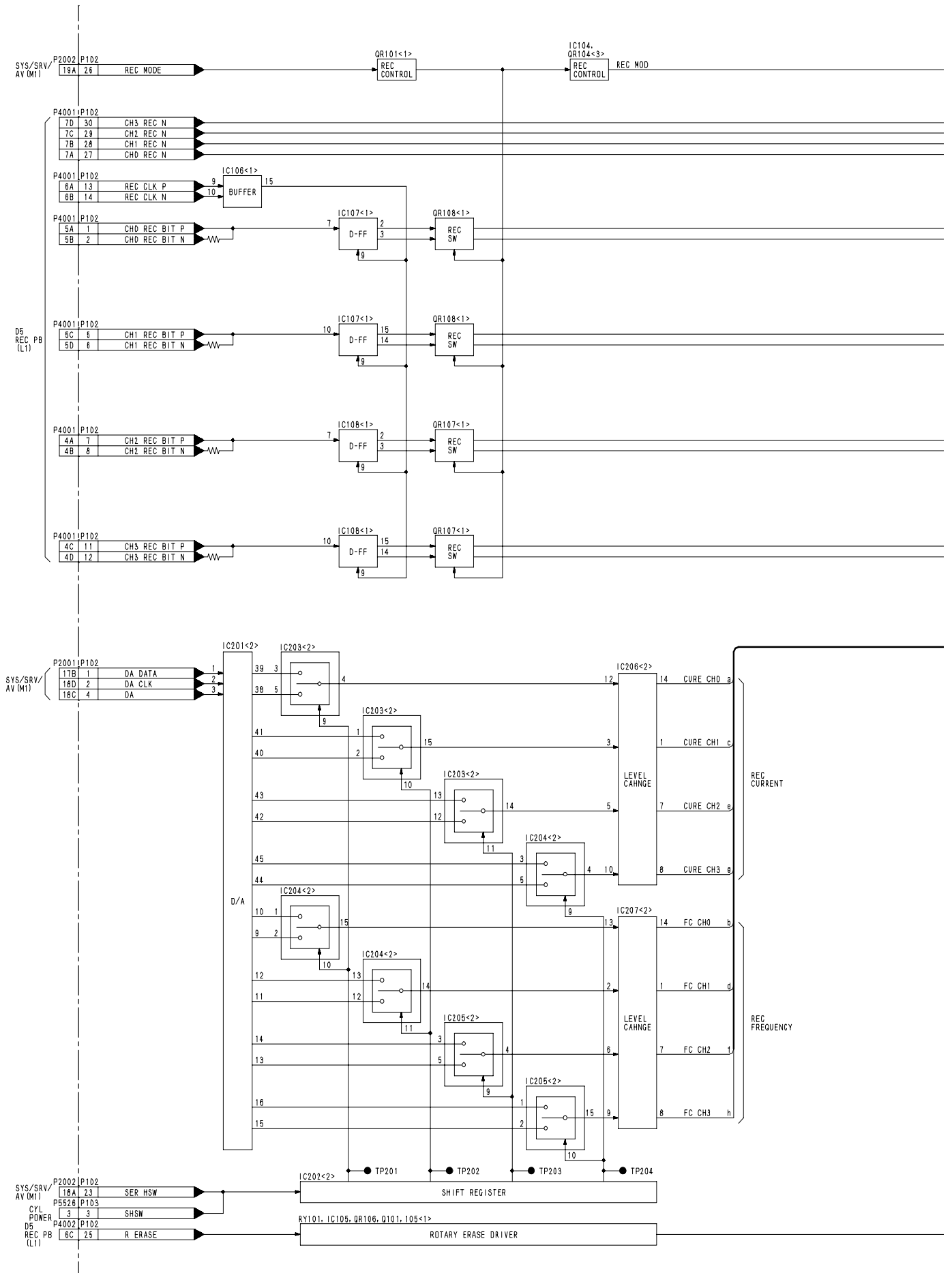


SDI IN (S5) BLOCK DIAGRAM





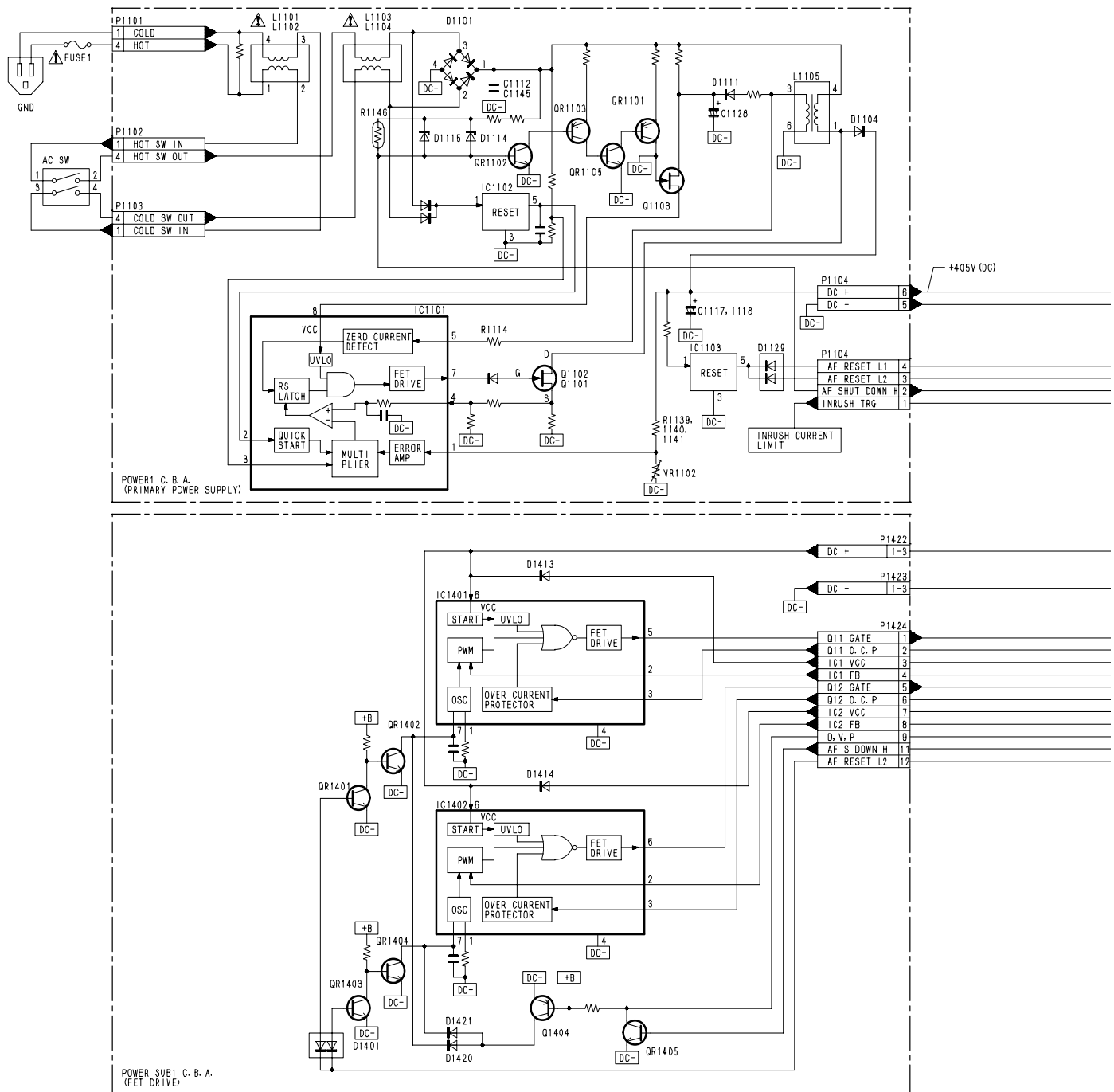
REC AMP BLOCK DIAGRAM



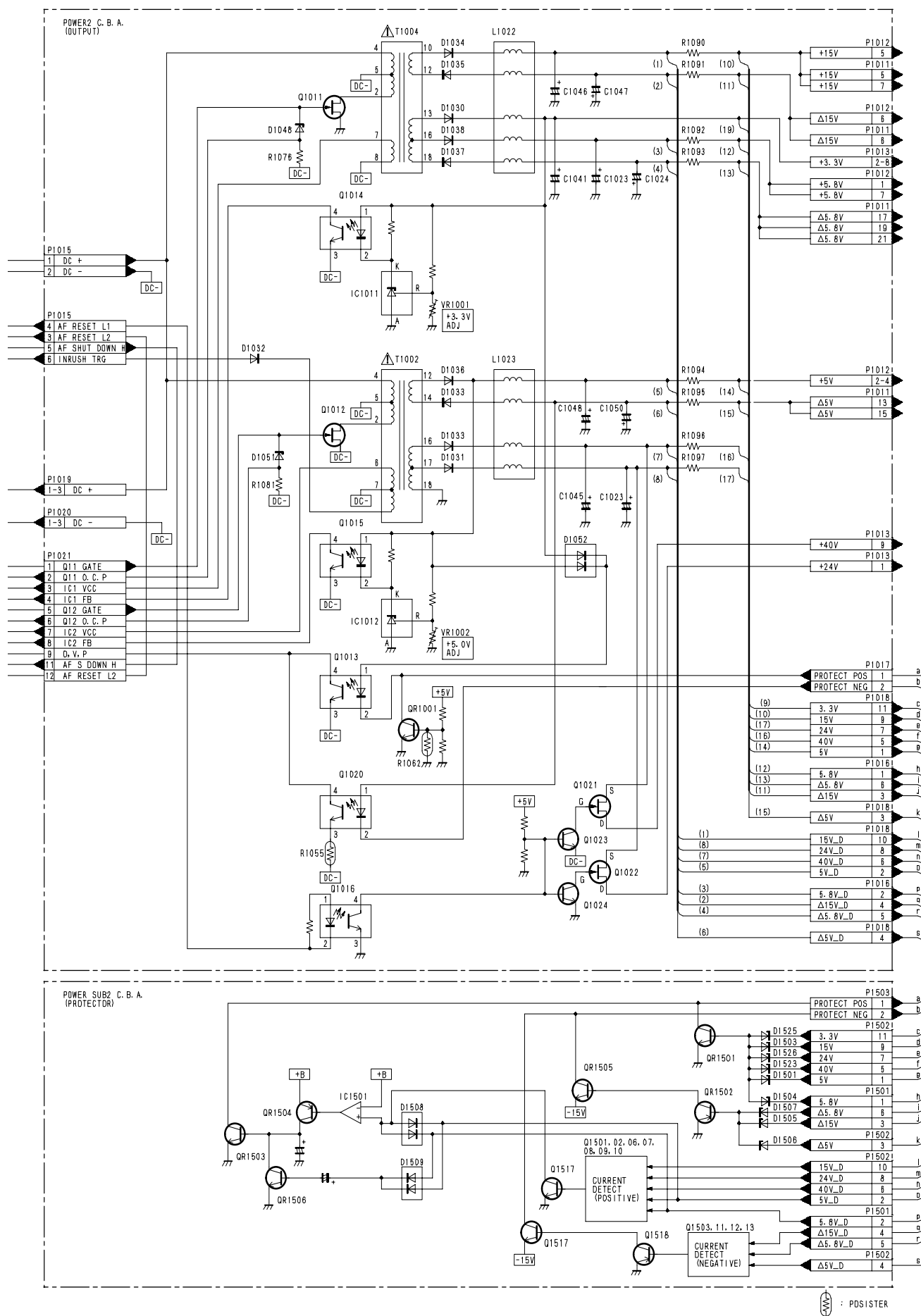
The diagram illustrates the internal circuitry of a recording system, organized into several functional blocks:

- Input and Control Section:** At the top, it shows input channels (P001/P100, P401/P100, P401/P100, P401/P100) and control signals (SYS/SW, AT/MT, REC MODE, REC NOD, REC N, REC P, REC N, REC BIT P, REC BIT N). These inputs feed into various control logic blocks, including buffers, D-FFs, and comparators.
- Recording Current Section:** This section processes the input signals into recording current. It features a large block labeled "LEVEL CHANGE" which receives inputs from multiple channels and outputs to "REC CURR" (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791,

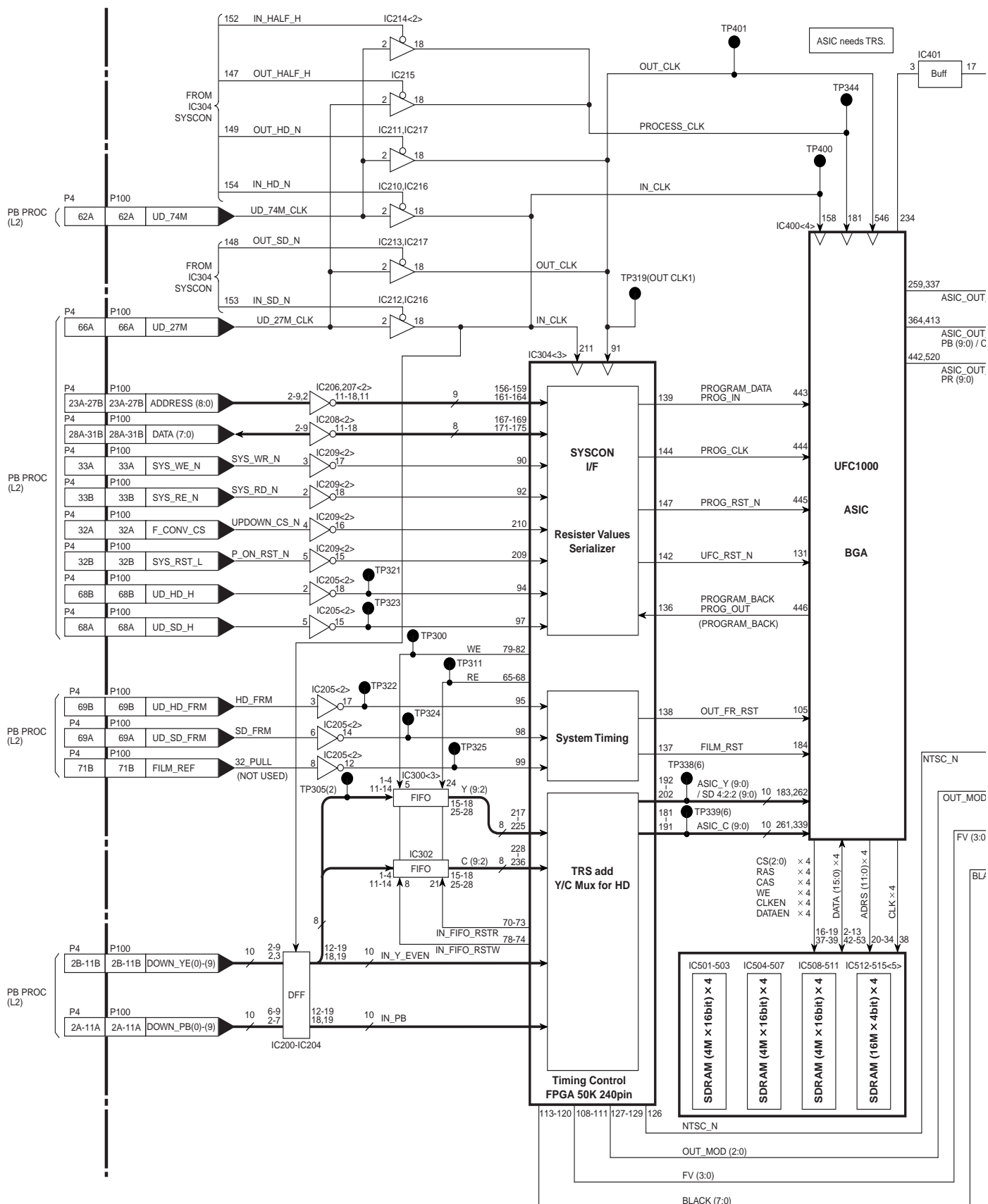
POWER (POWER 1 & 2) BLOCK DIAGRAM



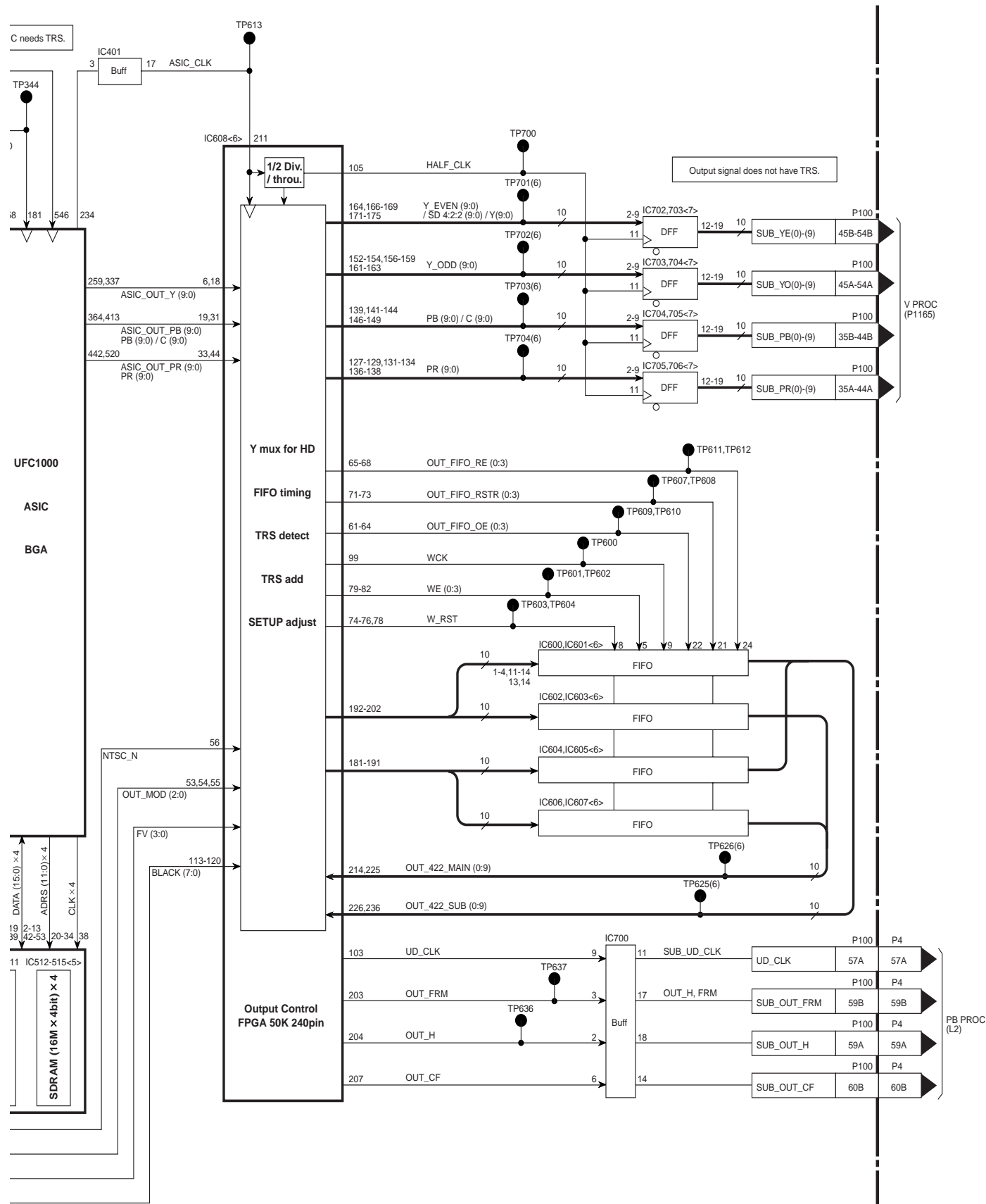
POWER (POWER 1 & 2) BLOCK DIAGRAM



AJ-UDC3700P UP_DOWN CONVERTER BLOCK DIAGRAM (option)

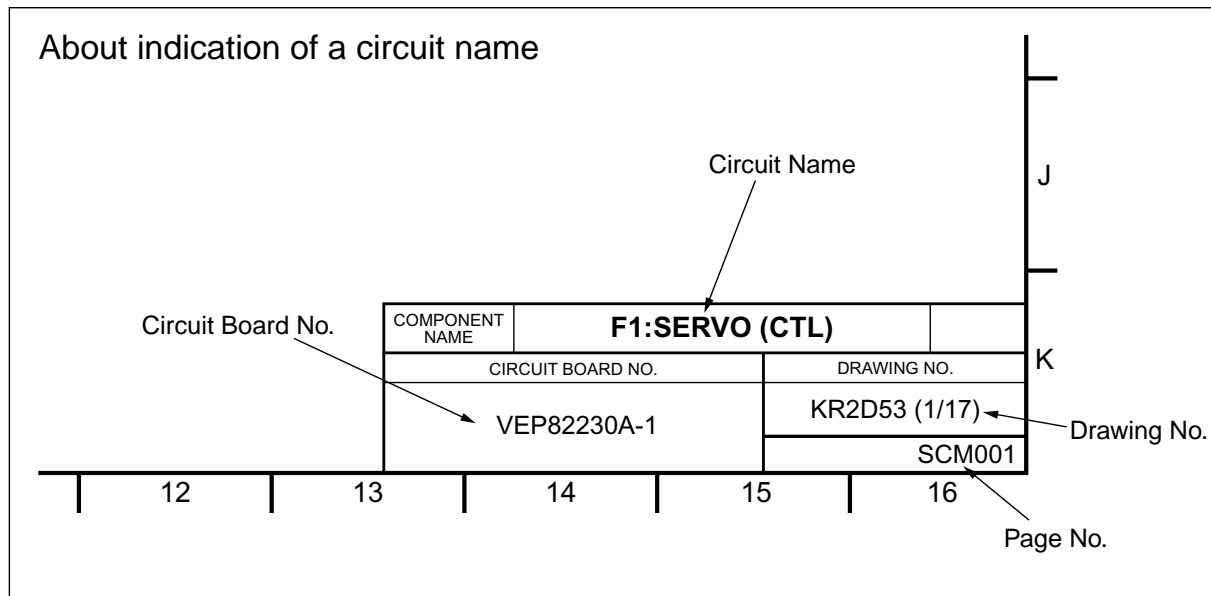


AJ-UDC3700P UP_DOWN CONVERTER BLOCK DIAGRAM (option)



SECTION 6

SCHEMATIC DIAGRAMS




NOTE:
BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION8

CAUTION

THE ☐ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CONTENTS

L1:D5 REC PB

CONNECTOR (1/33)	SCM1
SYS_IF (2/33)	SCM2
VIDEO_IN (3/33)	SCM3
REC_VPLD (4/33)	SCM4
EE1_MEMORY (5/33)	SCM5
AV_REC (6/33)	SCM6
EE3_MEMORY (7/33)	SCM7
RF_REC (8/33)	SCM8
AV_MEMORY (9/33)	SCM9
RF_IF (10/33)	SCM10
AV_PB (11/33)	SCM11
AV_MEM_PB (12/33)	SCM12
PB_ASSIST (13/33)	SCM13
RF_MEMORY18 (14/33)	SCM14
FRAM_SLOW (15/33)	SCM15
VIDEO_OUT (16/33)	SCM16
AES_IO (17/33)	SCM17
CLK_DIST (18/33)	SCM18
DIO1234 (19/33)	SCM19
DIO5678 (20/33)	SCM20
REC_PLD (21/33)	SCM21
PCONCLK (22/33)	SCM22
PCONCLK2 (23/33)	SCM23
RF_MEMORY2 (24/33)	SCM24
AUD_PB_CNT (25/33)	SCM25
AUD_PB_MEM (26/33)	SCM26
JOG_PLD (27/33)	SCM27
PCM_JOG12 (28/33)	SCM28
PCM_JOG34 (29/33)	SCM29
ACNT1234 (30/33)	SCM30
ACNT5678 (31/33)	SCM31
PB_PLD (32/33)	SCM32
SNT (33/33)	SCM33

L1:PCM PB SUB

PCMPB (1/2)	SCM34
JOG_PLD (2/2)	SCM35

L1:REC SUB

CONNECTOR (1/5)	SCM36
FPGA_CONFIG (2/5)	SCM37
REC_MAIN (3/5)	SCM38
AV_MEM (4/5)	SCM39
AUCH (5/5)	SCM40

L1:PB SUB

CONNECTOR (1/4)	SCM41
FPGA_CONFIG (2/4)	SCM42
CH0_CHPB,ECC (3/4)	SCM43
CH1_CHPB,ECC (4/4)	SCM44

L2:PB PROC

CONNECTOR (1/34)	SCM45
SYS_IF (2/34)	SCM46
SYNC_SEP (3/34)	SCM47
SD_REF (4/34)	SCM48
REF_PLL (5/34)	SCM49
SGEN (6/34)	SCM50
HD_PLL (7/34)	SCM51
PLL36 (8/34)	SCM52
SD_PLL (9/34)	SCM53
REF_OUT (10/34)	SCM54
DATA_IN (11/34)	SCM55
CONC_D5_Y (12/34)	SCM56
CONC_D5_C (13/34)	SCM57
COMPA (14/34)	SCM58
MEMORY A (15/34)	SCM59
HD_CONCEAL_A (16/34)	SCM60
COMP B (17/34)	SCM61
MEMORY B (18/34)	SCM62
HD_CONCEAL_B (19/34)	SCM63

COMP C (20/34)	SCM64
MEMORY C (21/34)	SCM65
HD_CONCEAL_C (22/34)	SCM66
COMP D (23/34)	SCM67
MEMORY D (24/34)	SCM68
HD_CONCEAL_D (25/34)	SCM69
COMP_MUX (26/34)	SCM70
VLFP (27/34)	SCM71
RC_Y (28/34)	SCM72
RC_C (29/34)	SCM73
UFC2_CONTACT (30/34)	SCM74
UFC1_ASIC (31/34)	SCM75
UFC1_SDRAM (32/34)	SCM76
DATA_OUT (33/34)	SCM77
META_ENC (34/34)	SCM78

L2:L2 GATE

L2 GATE (1/1)	SCM79
---------------	-------

L2:CLK DRV

L2 CLK_DRV (1/1)	SCM80
------------------	-------

M1:SYS_SRV

SYS_SRV (1/30)	SCM81
SYS_SRV (2/30)	SCM82
SYS_SRV (3/30)	SCM83
SYS_SRV (4/30)	SCM84
SYS_SRV (5/30)	SCM85
SYS_SRV (6/30)	SCM86
SYS_SRV (7/30)	SCM87
SYS_SRV(AV_MPU) (8/30)	SCM88
SYS_SRV(AV_MPU) (9/30)	SCM89
SYS_SRV(BUFFER1) (10/30)	SCM90
SYS_SRV(BUFFER2) (11/30)	SCM91
SYS_SRV(TC.GA) (12/30)	SCM92
SYS_SRV(SYS_IF) (13/30)	SCM93
SYS_SRV(ANALOG_IO) (14/30)	SCM94
SYS_SRV(CTL_AMP1) (15/30)	SCM95
SYS_SRV(CTL_AMP2) (16/30)	SCM96
SYS_SRV(CAP_FG_AMP1) (17/30)	SCM97
SYS_SRV(CAP_FG_AMP2) (18/30)	SCM98
SYS_SRV(S_FG_AMP) (19/30)	SCM99
SYS_SRV(T_FG_AMP) (20/30)	SCM100
SYS_SRV(MPU_MAIN) (21/30)	SCM101
SYS_SRV(MPU_PERI) (22/30)	SCM102
SYS_SRV(CTL_GA) (23/30)	SCM103
SYS_SRV(IO_PORT) (24/30)	SCM104
SYS_SRV(RESERVE_PLD) (25/30)	SCM105
SYS_SRV(AT_GA) (26/30)	SCM106
SYS_SRV(AT_AMP_CHA) (27/30)	SCM107
SYS_SRV(AT_AMP_CHB) (28/30)	SCM108
SYS_SRV(REGULATOR) (29/30)	SCM109
SYS_SRV(CONNECTOR) (30/30)	SCM110

S0:DRIVE

CONNECTOR (1/11)	SCM111
SOLENOID DRIVE (2/11)	SCM112
CAPASTAN DRIVE (3/11)	SCM113
CYLINDER DRIVE (4/11)	SCM114
S REEL DRIVE (5/11)	SCM115
T REEL DRIVE (6/11)	SCM116
MAIN SUB DRIVE (7/11)	SCM117
MECHANISM DRIVE (8/11)	SCM118
GARAGE DRIVE (9/11)	SCM119
MECHANISM CONTROL (10/11)	SCM120
POWER REGULATOR (11/11)	SCM121

S1:EQ

EQ (1/6)	SCM122
EQ (2/6)	SCM123
EQ (3/6)	SCM124
EQ (4/6)	SCM125
EQ (5/6)	SCM126
EQ (6/6)	SCM127

S2:CUE_TC

CUE_TC (1/10).....	SCM128
CUE_TC (2/10).....	SCM129
CUE_TC (3/10).....	SCM130
CUE_TC (4/10).....	SCM131
CUE_TC (5/10).....	SCM132
CUE_TC (6/10).....	SCM133
CUE_TC (7/10).....	SCM134
CUE_TC (8/10).....	SCM135
CUE_TC (9/10).....	SCM136
CUE_TC (10/10).....	SCM137

S3:A AD/DA

A_AD/DA (1/6).....	SCM138
A_AD/DA (2/6).....	SCM139
A_AD/DA (3/6).....	SCM140
A_AD/DA (4/6).....	SCM141
A_AD/DA (5/6).....	SCM142
A_AD/DA (6/6).....	SCM143

S4:SDI OUT

SDI OUT (1/17)	SCM144
HD_INPUT (2/17)	SCM145
SYS_IF (3/17).....	SCM146
HD_CHAR_GEN (4/17).....	SCM147
HD_SDI_OUT (5/17)	SCM148
SD_CLK_SEL (6/17)	SCM149
SD_MUX (7/17).....	SCM150
VIDEO_DATA (8/17)	SCM151
SD_FORMAT_CONV (9/17)	SCM152
SD_ENC1 (10/17)	SCM153
SD_CMPST_MONI_OUT (11/17)	SCM154
SD_SDI_OUT_SEL (12/17).....	SCM155
SD_CHAR_GEN (13/17).....	SCM156
SD_SDI_OUT (14/17)	SCM157
SD_SDI_MONI_OUT (15/17).....	SCM158
SD_CMPST_OUT (16/17).....	SCM159
SD_CMPST_MONI_OUT (17/17)	SCM160

S4:HD SDI TX

SDI TX(1/2)	SCM161
SDI TX (2/2)	SCM162

S5:SDI IN

SDI IN (1/27)	SCM163
POWER (2/27)	SCM164
SYS_IF (3/27).....	SCM165
HD_SDI_IN (4/27).....	SCM166
INPUT_CHK (5/27).....	SCM167
META_DATA (6/27)	SCM168
MAIN_S2P (7/27)	SCM169
MAIN_DEC (8/27)	SCM170
SD_DEC2 (9/27)	SCM171
INT_SG (10/27).....	SCM172
VANC & VITC & SEL (11/27)	SCM173
RATE_CON (12/27)	SCM174
RATE_CON_CLK (13/27)	SCM175
4CHIP_DIV (14/27)	SCM176
COMP A (15/27).....	SCM177
MEMORY A (16/27)	SCM178
COMP B (17/27).....	SCM179
MEMORY B (18/27)	SCM180
COMP C (19/27).....	SCM181
MEMORY C (20/27)	SCM182
COMP D (21/27).....	SCM183
MEMORY D (22/27)	SCM184
DATA_MUX (23/27)	SCM185
CPU A (24/27)	SCM186
CPU B (25/27).....	SCM187
PLL36M (26/27).....	SCM188
CLK_SEL (27/27)	SCM189

S5:HD SDI RX

HD SDI RX(EQ) (1/3)	SCM190
HD SDI RX(CKR,S/P) (2/3)	SCM191
HD SDI RX(DEC) (3/3).....	SCM192

S5:RATE_CON

RATE_CON (1/3)	SCM193
RC_Y (2/3)	SCM194
RC_C (3/3).....	SCM195

S5:META_SUB

META_SUB (1/1)	SCM196
----------------------	--------

L MOTHER

L1_CONTACT (1/5)	SCM197
L2_CONTACT (2/5)	SCM198
S_CONTACT (3/5).....	SCM199
REAR_CONTACT (4/5)	SCM200
SDTI_CONTACT (5/5)	SCM201

S MOTHER

S_MOTHER (1/8).....	SCM202
S_MOTHER (2/8).....	SCM203
S_MOTHER (3/8).....	SCM204
S_MOTHER (4/8).....	SCM205
S_MOTHER (5/8).....	SCM206
S_MOTHER (6/8).....	SCM207
S_MOTHER (7/8).....	SCM208
S_MOTHER (8/8).....	SCM209

SUB MOTHER

SUB_MOTHER (1/1).....	SCM210
-----------------------	--------

REC_AMP

REC_AMP (1/4)	SCM211
REC_AMP (2/4)	SCM212
REC_AMP (3/4)	SCM213
REC_AMP(HEAD_CONN) (4/4)	SCM214

CYL POWER

CYL POWER (1/1).....	SCM215
----------------------	--------

AT DRIVE

AT DRIVE (1/1).....	SCM216
AT DRIVE (2/2).....	SCM217

AT POWER

AT POWER (1/1)	SCM218
----------------------	--------

MECH IF

MECH IF (1/1).....	SCM219
--------------------	--------

SERVO CNTL

SERVO CNTL (1/1).....	SCM220
-----------------------	--------

REAR JACK

REAR_JACK (1/3).....	SCM221
REAR_JACK (2/3)	SCM222
REAR_JACK (3/3)	SCM223

POWER1

POWER1 (1/1).....	SCM224
-------------------	--------

POWER2

POWER2 (1/1).....	SCM225
-------------------	--------

POWER SUB1

POWER_SUB_1 (1/1).....	SCM226
------------------------	--------

POWER SUB2

POWER_SUB_2 (1/1).....	SCM227
------------------------	--------

AUTO OFF LED

AUTO_OFF_LED (1/1)	SCM228
--------------------------	--------

EJECT

EJECT (1/1)	SCM228
-------------------	--------

ERROR LED

ERROR_LED (1/1).....	SCM228
----------------------	--------

FRONT CNTL1

FRONT_CNTL1(PIO/AD) (1/4)	SCM229
FRONT_CNTL1(DRIVER) (2/4).....	SCM230
FRONT_CNTL1(I/F) (3/4)	SCM231
FRONT_CNTL1(CONNECTOR) (4/4)	SCM232

FRONT CNTL2

FRONT_CNTL2(MPU) (1/4) SCM233
FRONT_CNTL2(MEMORY) (2/4) SCM234
FRONT_CNTL2(ACRTC) (3/4) SCM235
FRONT_CNTL2(CONNECTOR) (4/4) SCM236

FRONT SW

FRONT_SW(KEY_SCAN) (1/3)..... SCM237
FORNT_SW(LED_OUT) (2/3) SCM238
FRONT_SW(SW/CONNECTOR) (3/3)..... SCM239

FRONT LED

FRONT_LED (1/1) SCM240

MEM_CARD_CNCT

MEM_CARD_CNCT (1/1) SCM241

FR FUNCTION

FR_FUNCTION (1/1) SCM242

FR MODE

FR_MODE (1/1) SCM243

FR HP VR

FR_HP_VR (1/1)..... SCM244

FR HP JACK

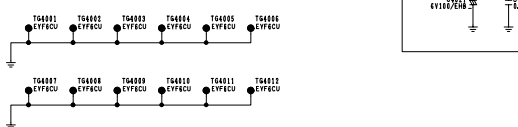
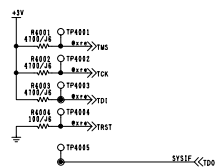
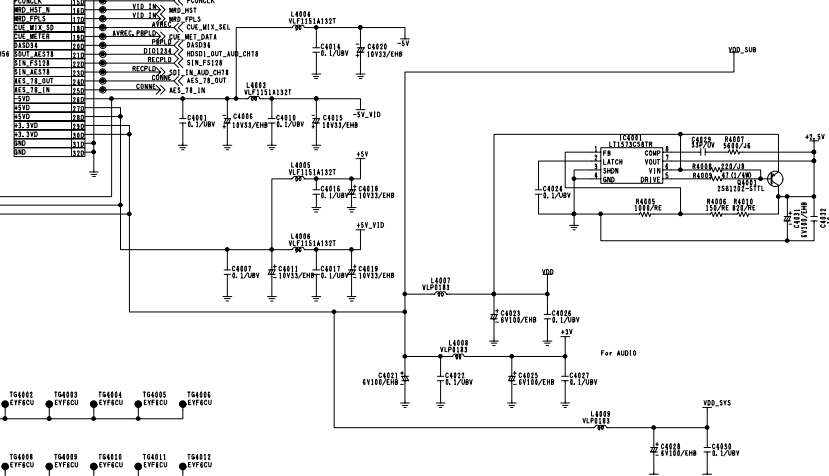
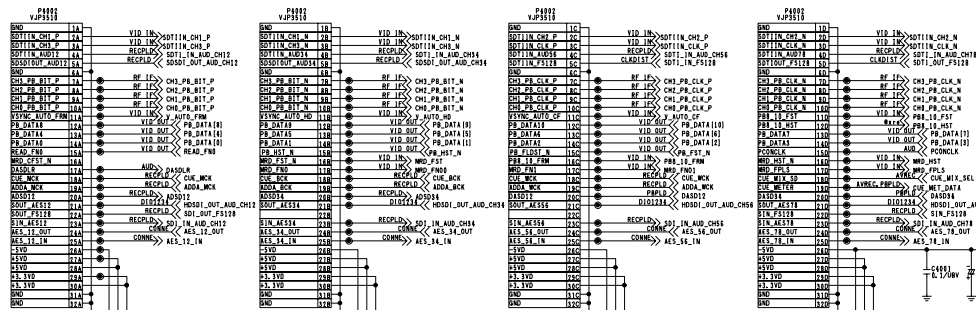
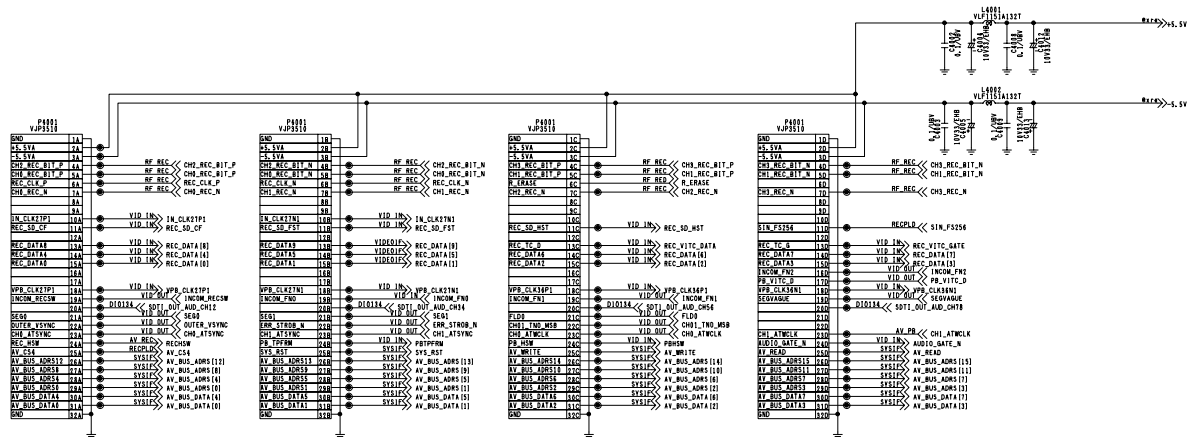
FR_HP_JACK (1/1)..... SCM244

UP DOWN: AJ-UDC3700P (option)

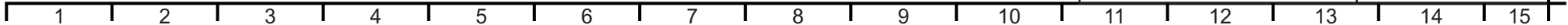
CONNECTOR (1/7) SCM245
I/O_BUFF (2/7) SCM246
IN_PROC (3/7)..... SCM247
UFC_ASIC (4/7)..... SCM248
SDRAM (5/7)..... SCM249
OUT_PROC (6/7)..... SCM250
OUT_BUFF (7/7)..... SCM251

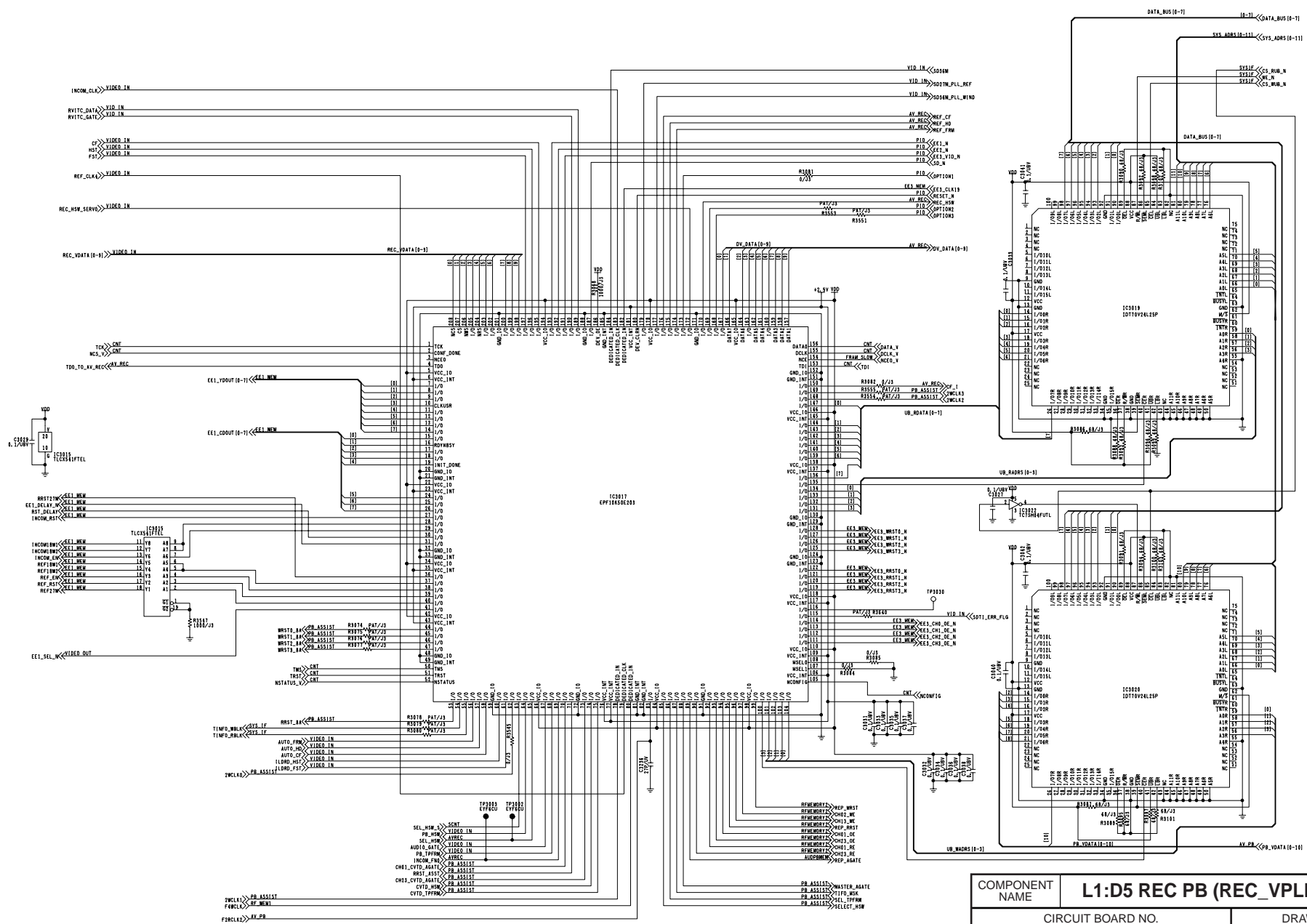
420P SUB: AJ-UDC3700P (option)

CONNECTOR (1/3) SCM252
SD_FORMAT_CONV (2/3) SCM253
420P_ANC_ENC (3/3) SCM254

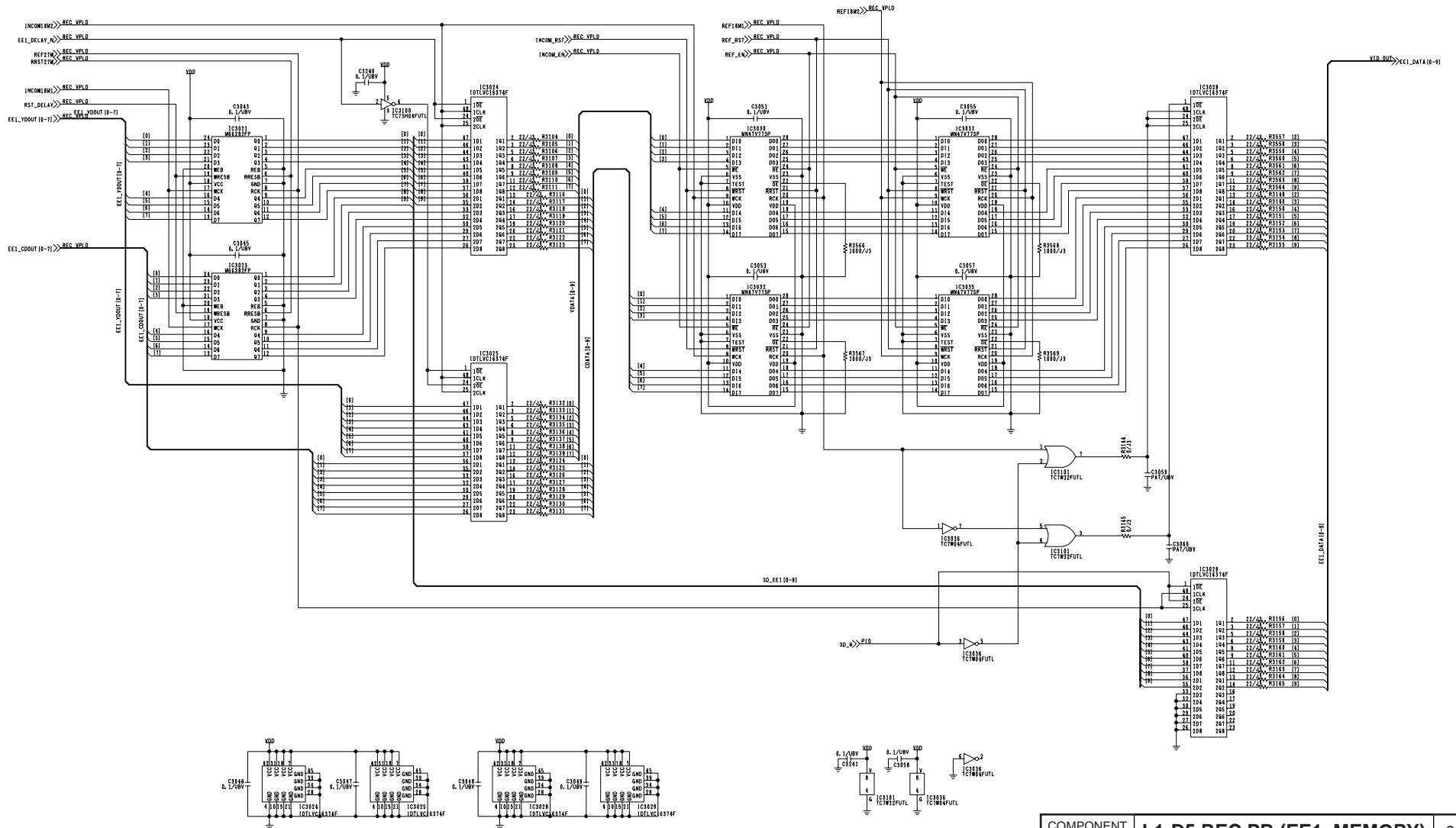


COMPONENT NAME	L1:D5 REC PB (CONNECTOR)	01/33
CIRCUIT BOARD NO.	VEP83563A	DRAWING NO.
		KR3Y62 (1/33)
		SCM001

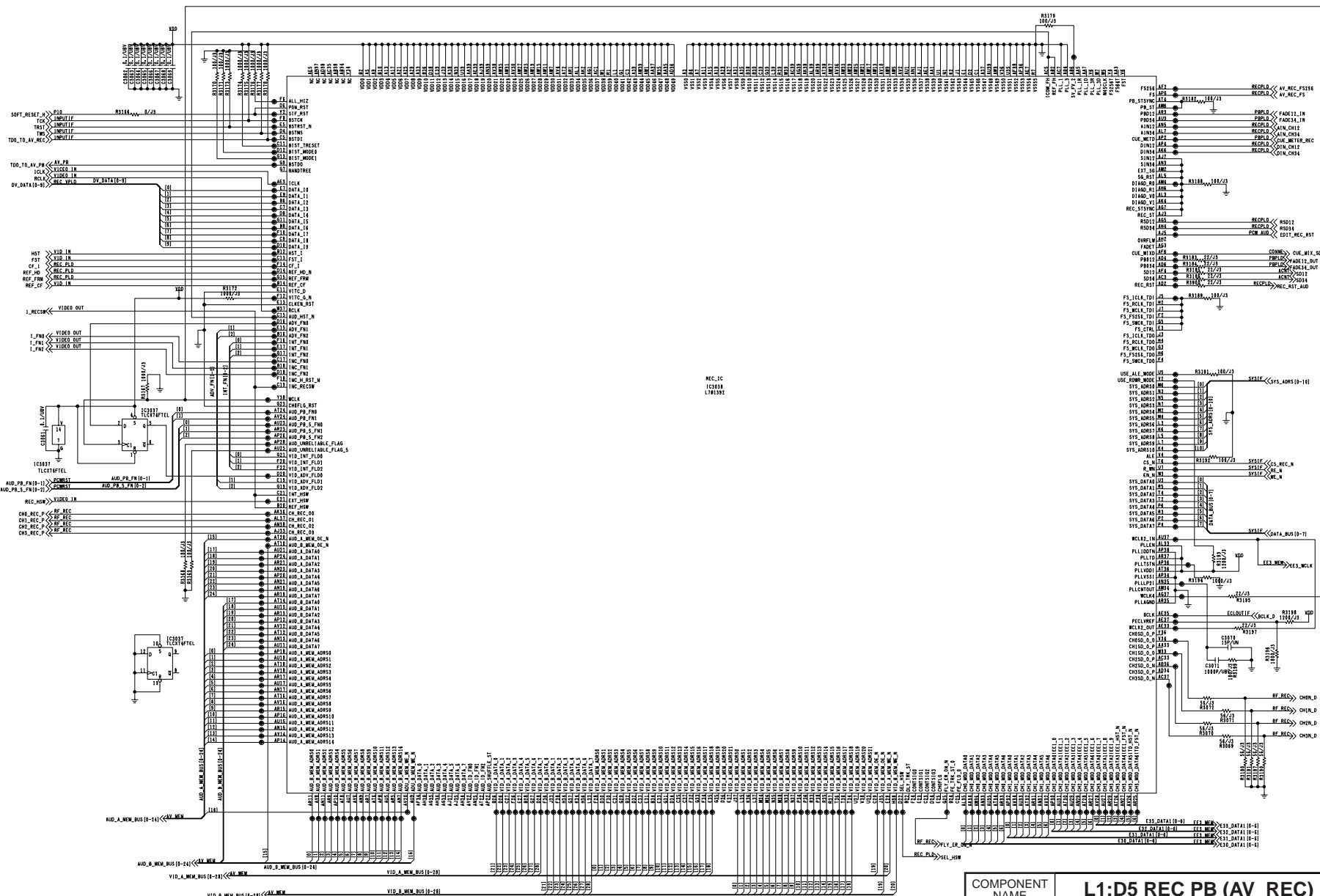




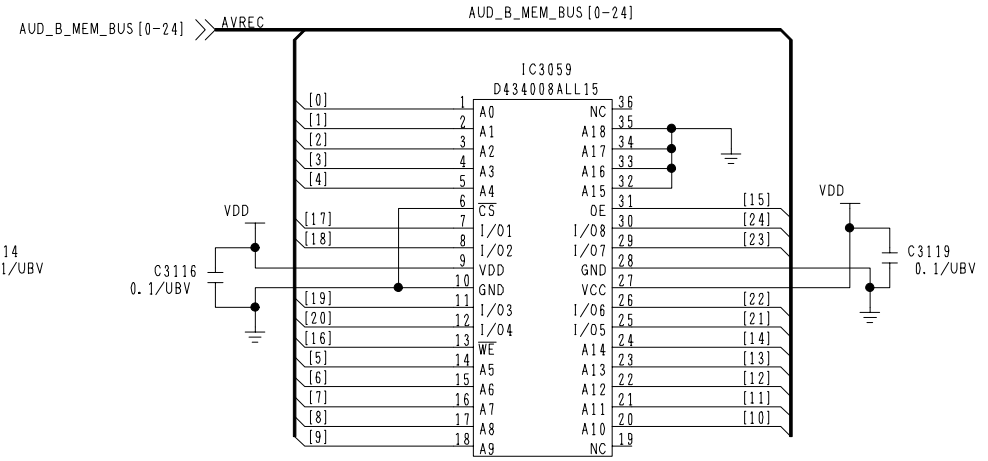
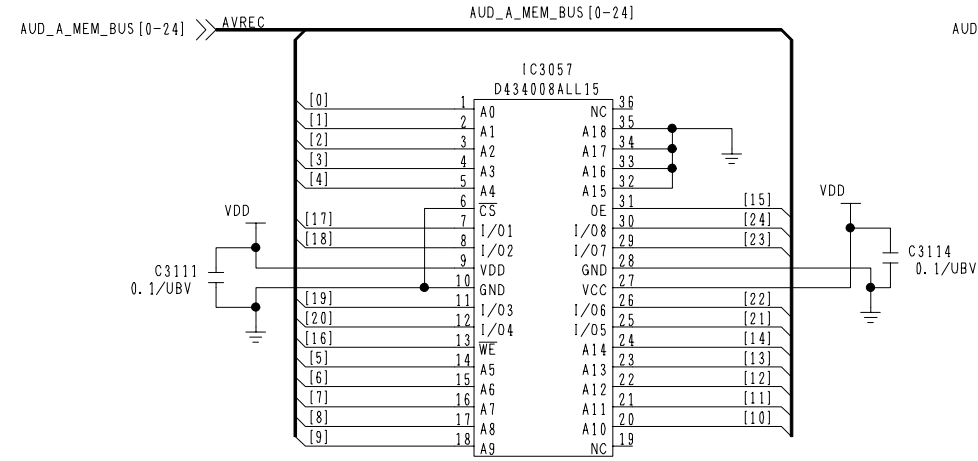
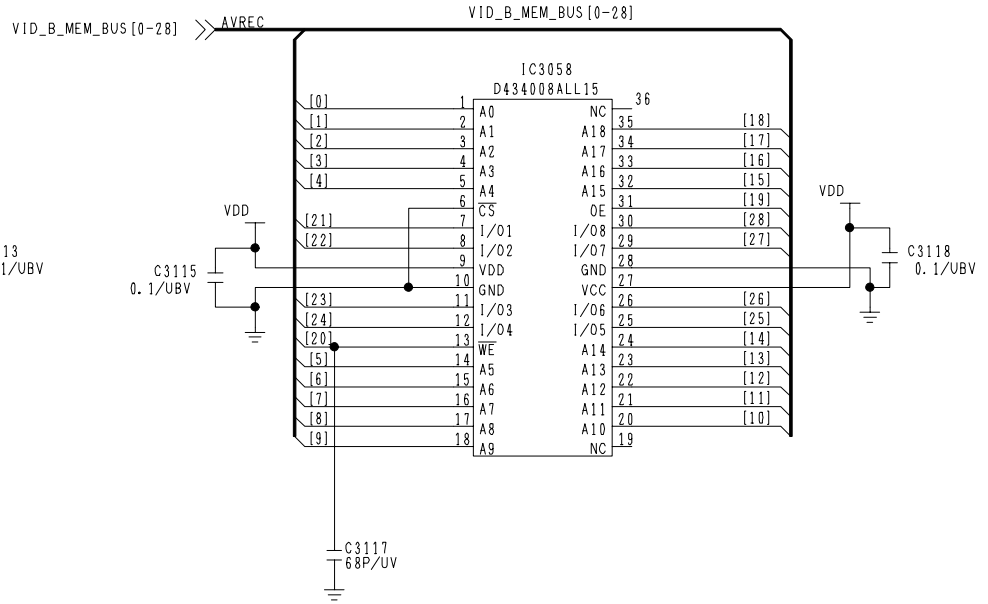
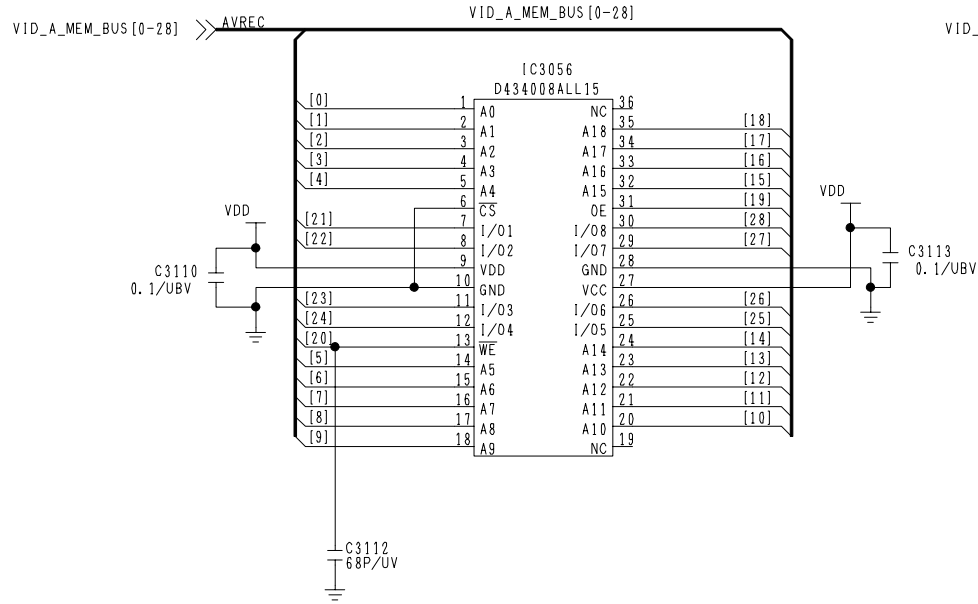
COMPONENT NAME	L1:D5 REC PB (REC_VPLD)		04/33
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83563A		KR3Y62 (4/33)	
		SCM004	



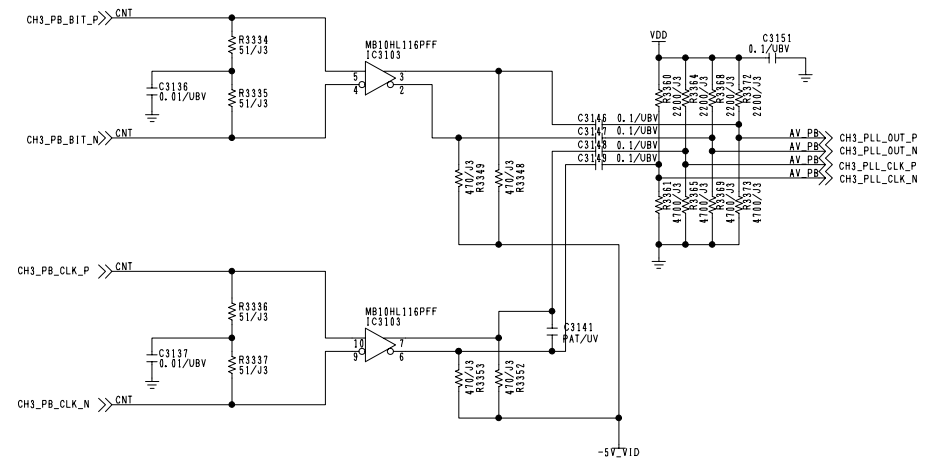
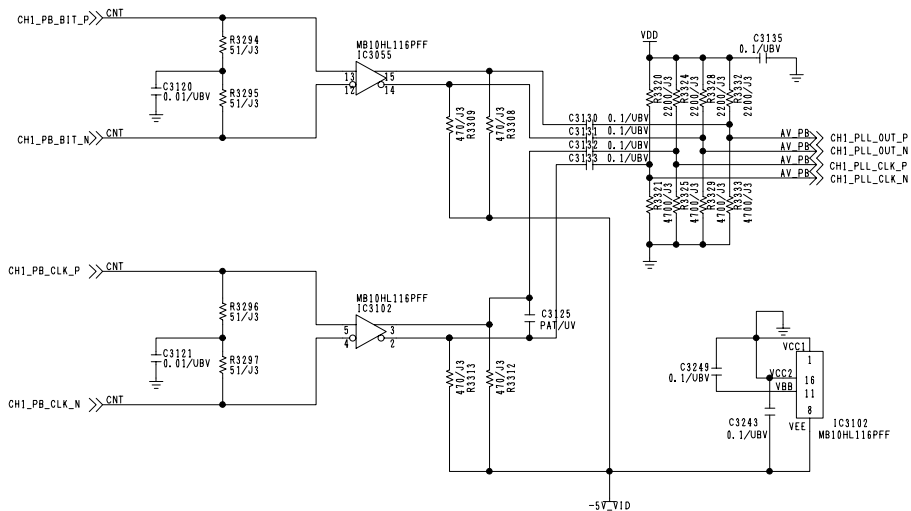
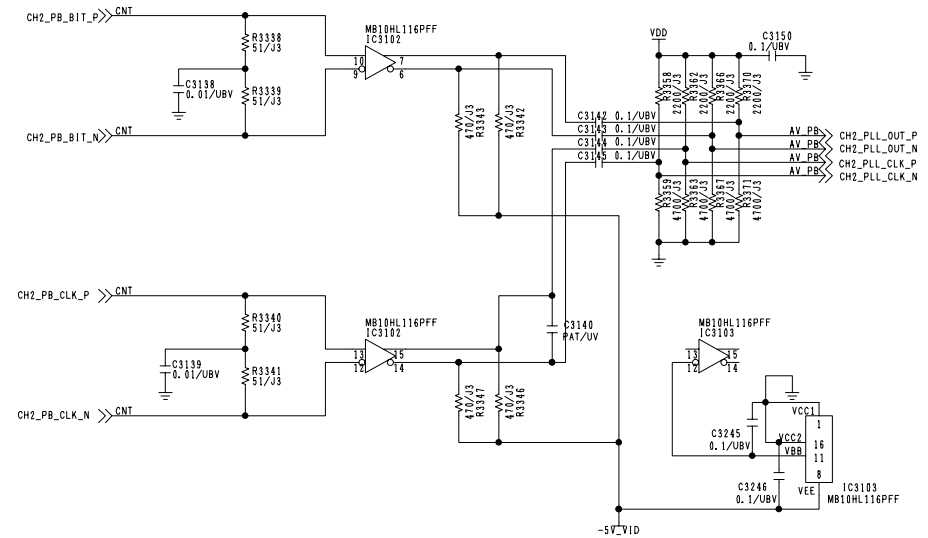
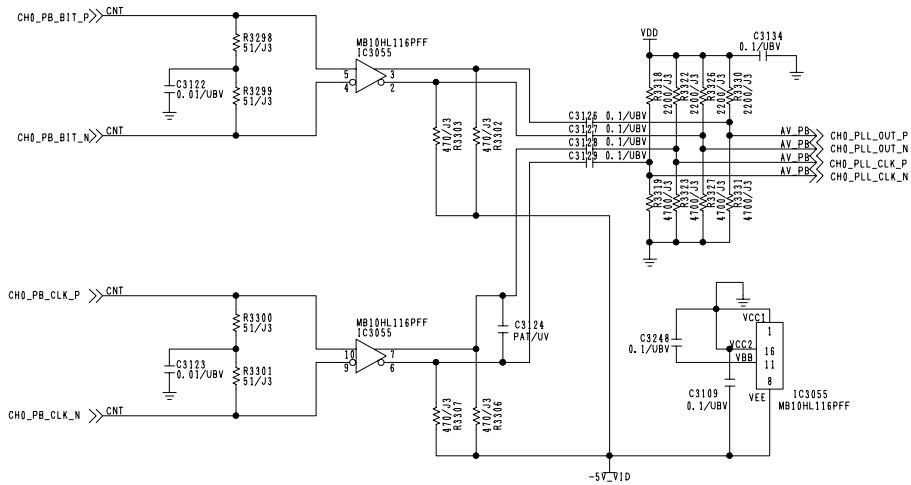
COMPONENT NAME	L1:D5 REC PB (EE1_MEMORY)	05/33
CIRCUIT BOARD NO.	VEP83563A	DRAWING NO. KR3Y62 (5/33)
		SCM005



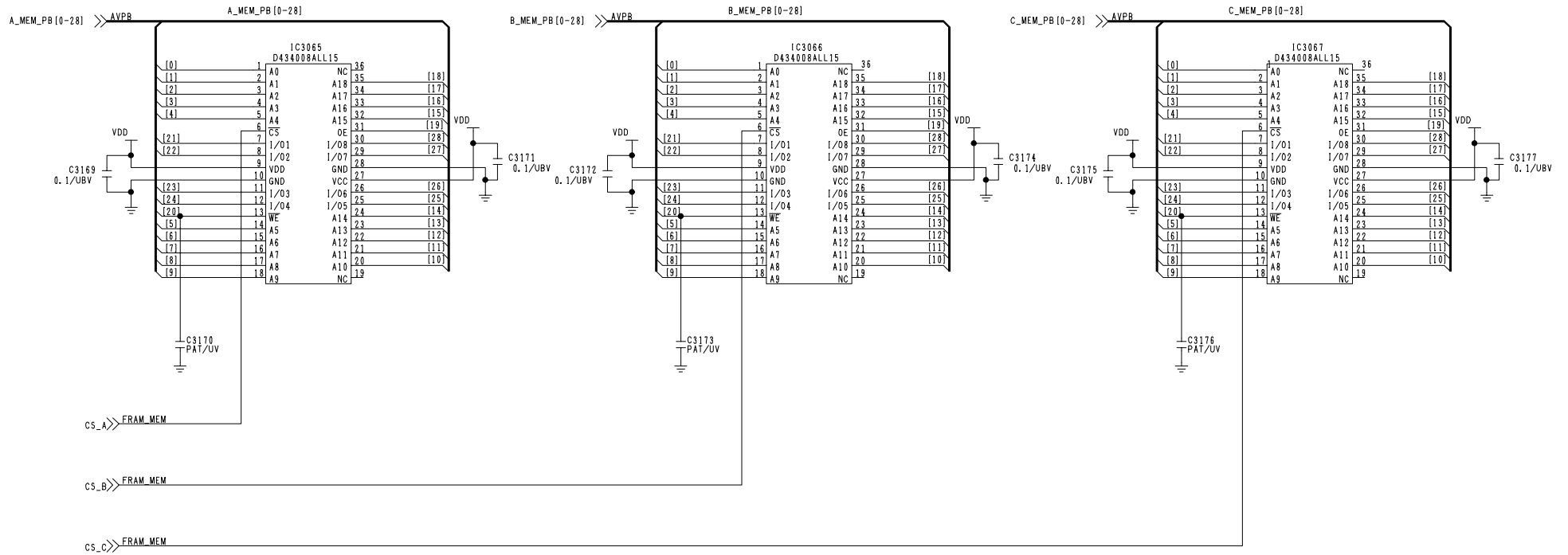
COMPONENT NAME	L1:D5 REC PB (AV_REC)	06/33
CIRCUIT BOARD NO.	VEP83563A	DRAWING NO.
		KR3Y62 (6/33)
		SCM006



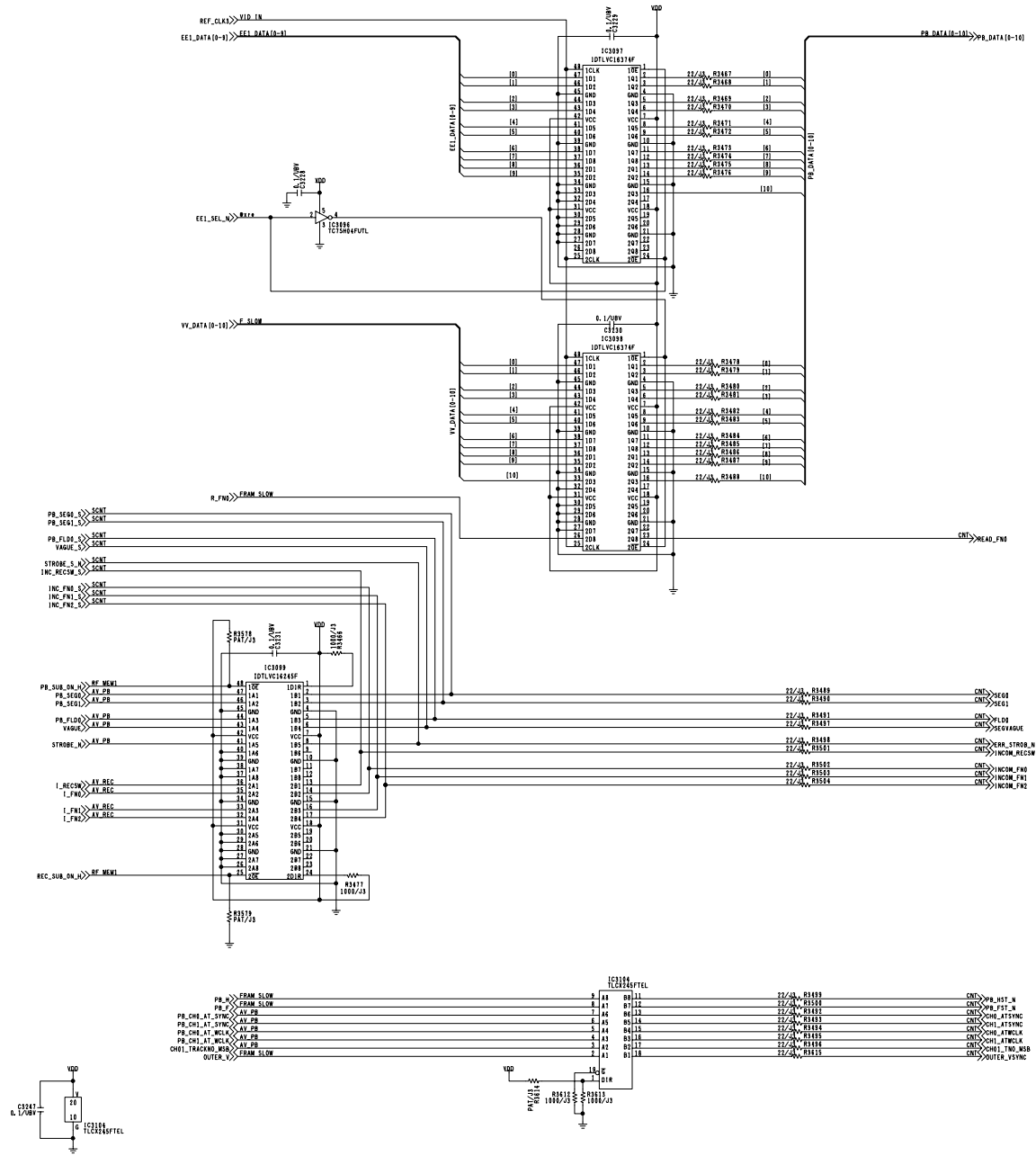
COMPONENT NAME	L1:D5 REC PB (AV_MEMORY)		09/33
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83563A		KR3Y62 (9/33)	
		SCM009	



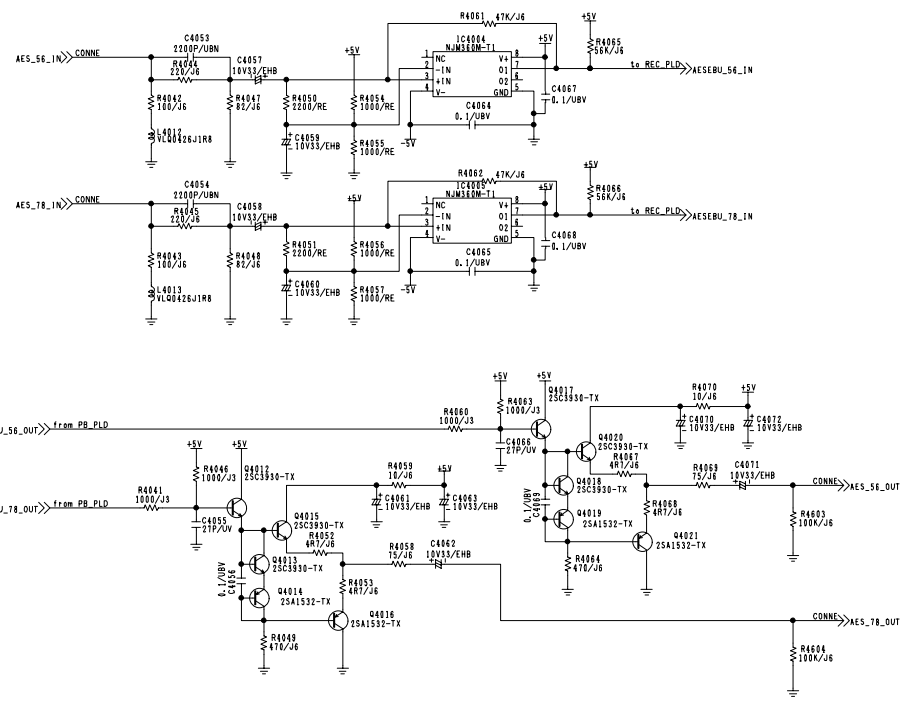
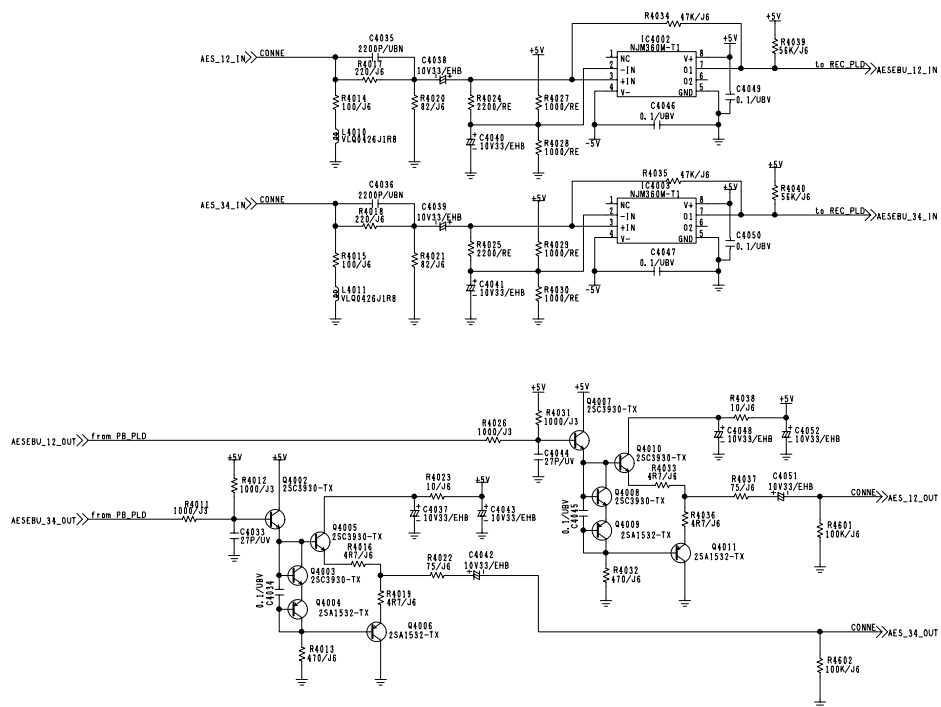
COMPONENT NAME	L1:D5 REC PB (RF_IF)	10/33
CIRCUIT BOARD NO.		DRAWING NO.
VEP83563A		KR3Y62 (10/33)
		SCM010



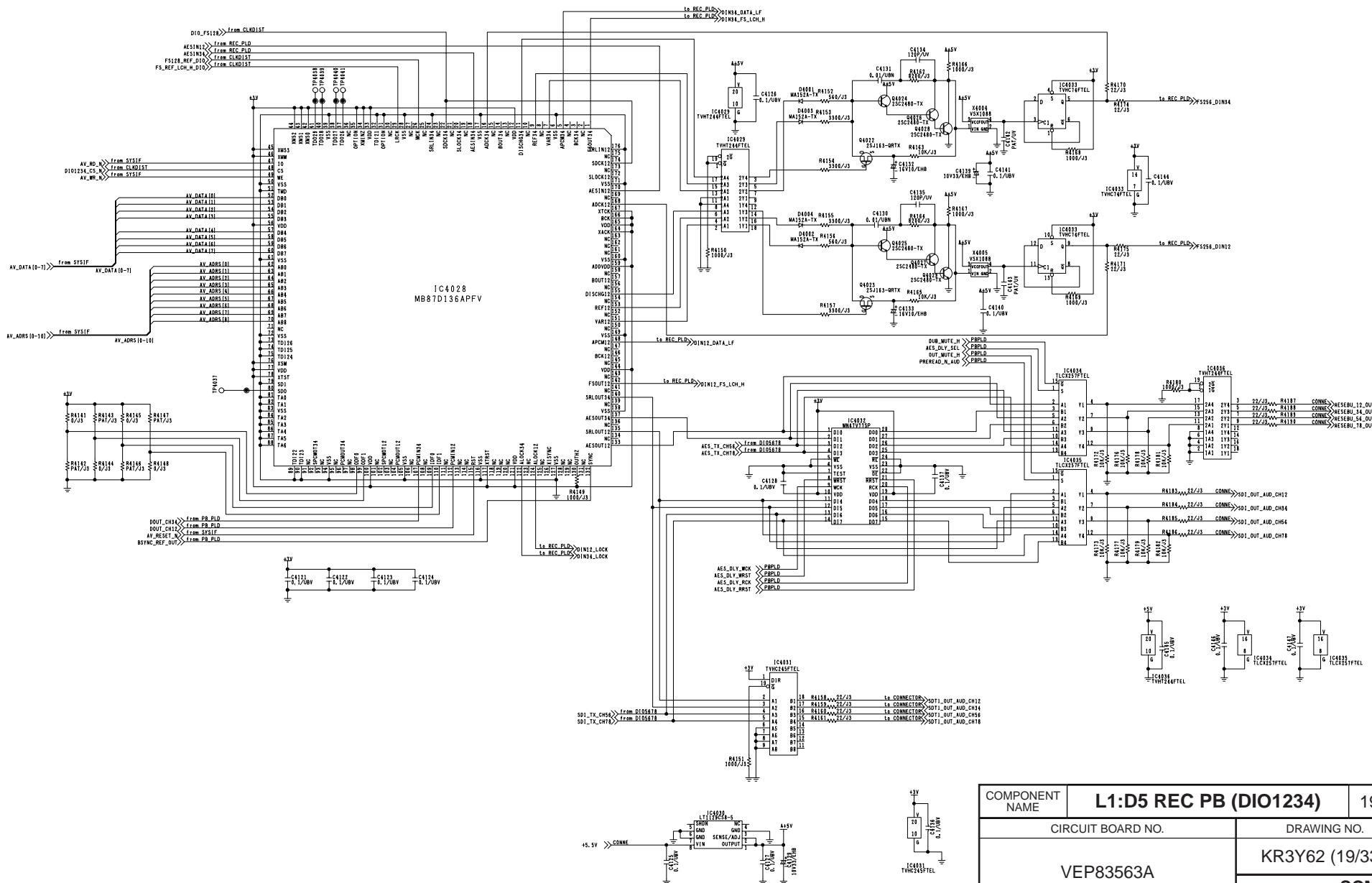
COMPONENT NAME	L1:D5 REC PB (AV_MEM_PB)	12/33
CIRCUIT BOARD NO.		DRAWING NO.
VEP83563A		KR3Y62 (12/33)
		SCM012



COMPONENT NAME	L1:D5 REC PB (VIDEO_OUT)		16/33
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83563A		KR3Y62 (16/33)	
		SCM016	



COMPONENT NAME	L1:D5 REC PB (AES_IO)	17/33
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83563A	KR3Y62 (17/33)	
	SCM017	



COMPONENT NAME		L1:D5 REC PB (DIO1234)	19/33
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83563A		KR3Y62 (19/33)	
		SCM019	

A

B

C

D

E

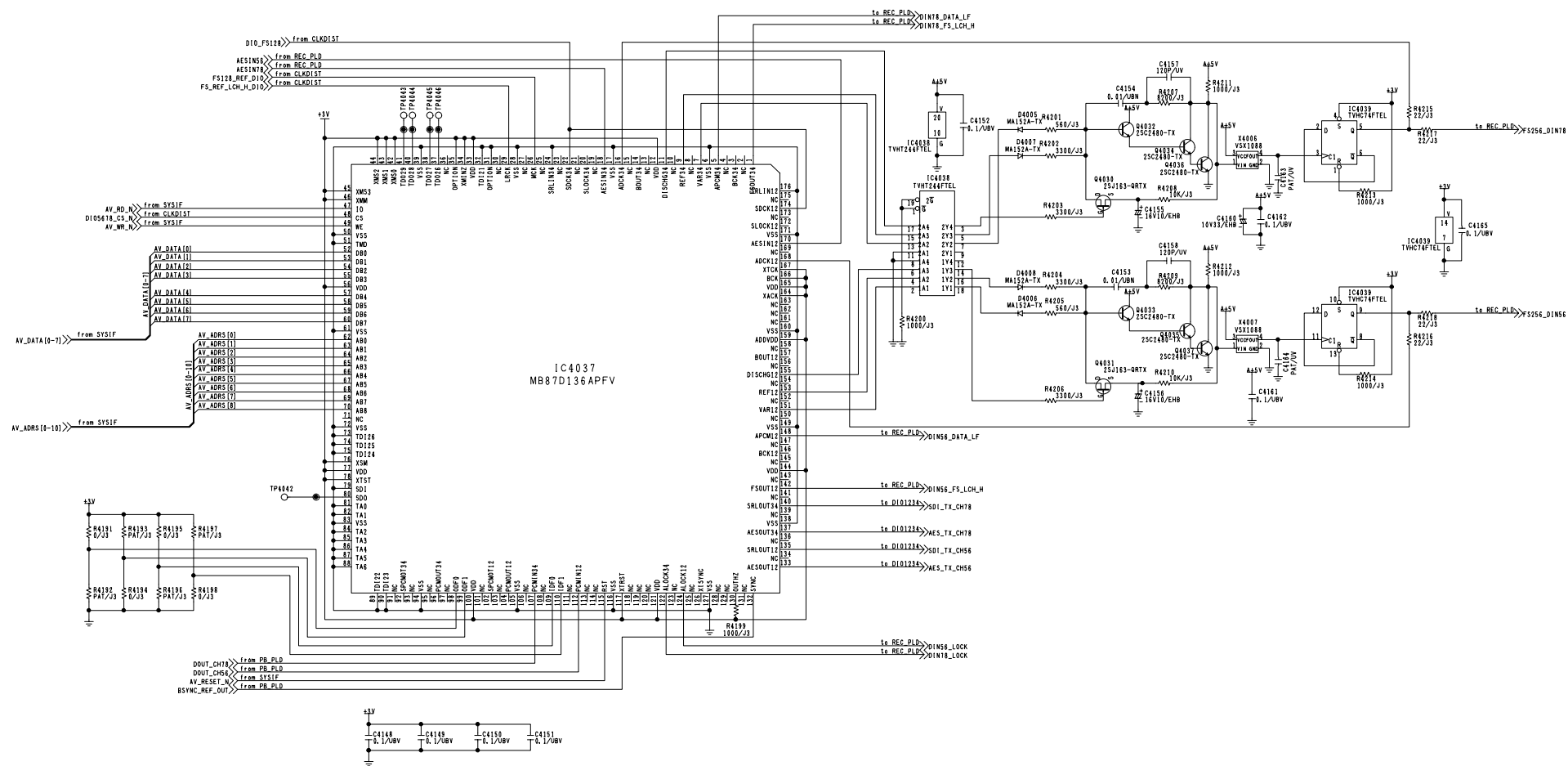
F

G

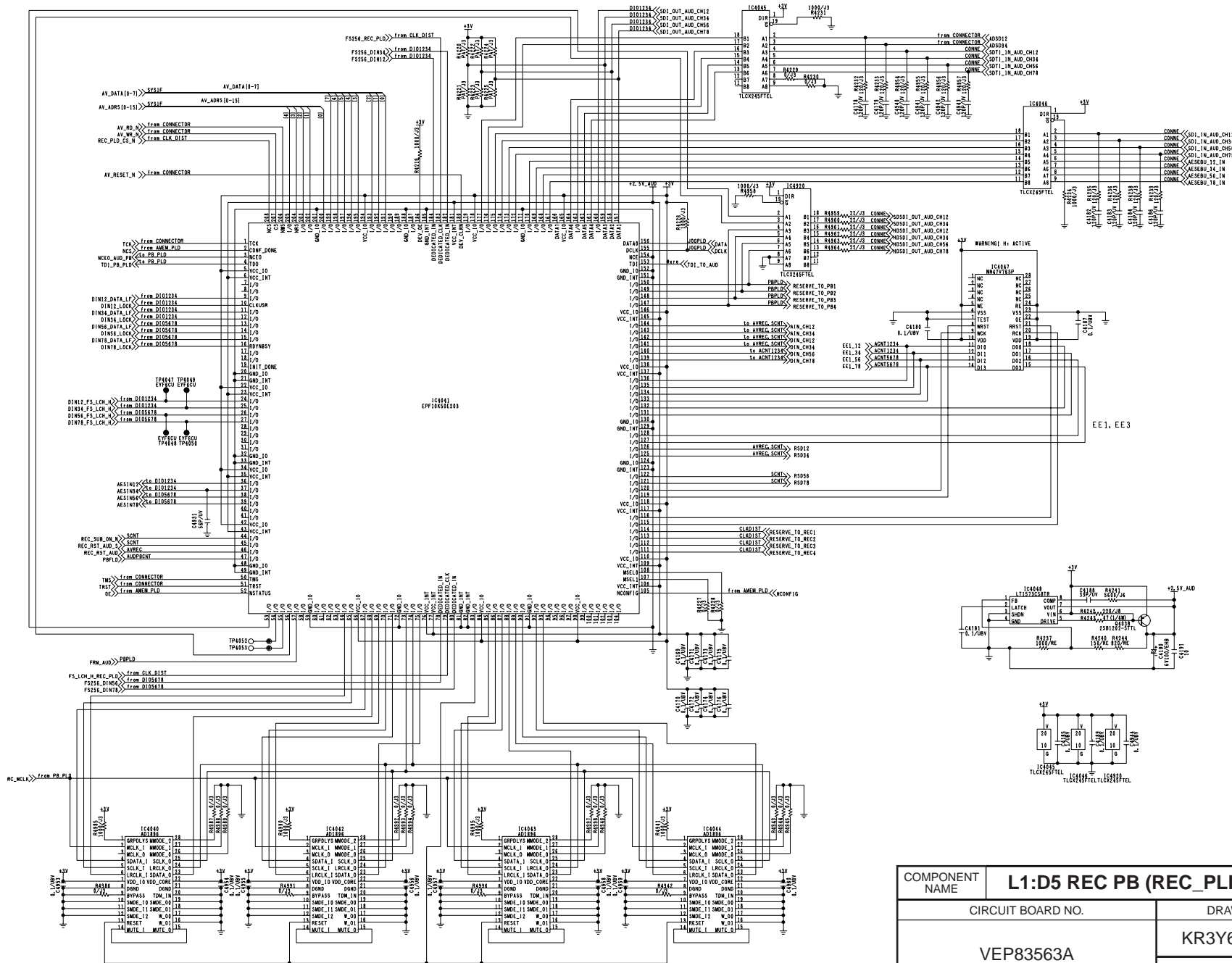
H

I

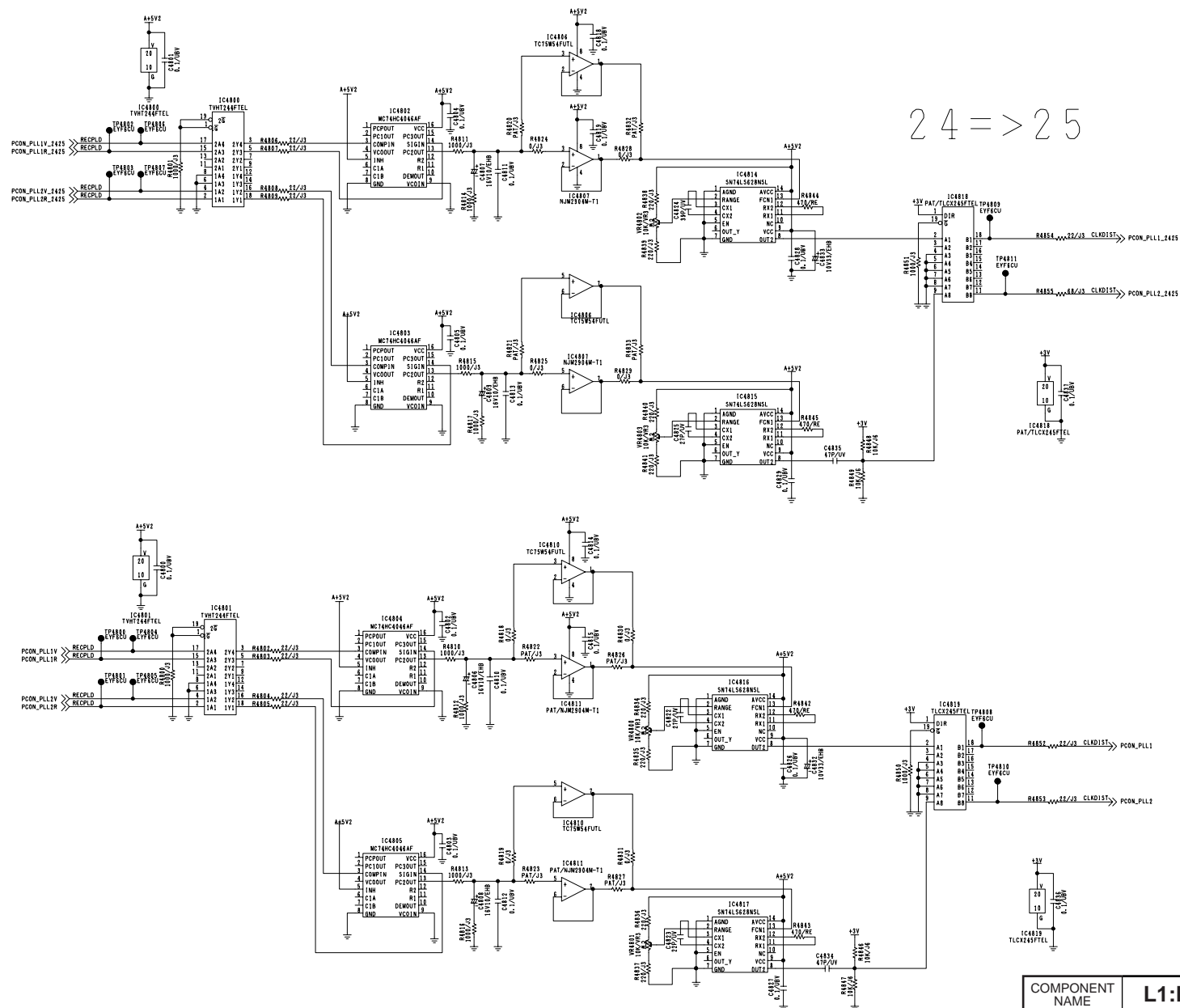
J



COMPONENT NAME	L1:D5 REC PB (DIO5678)	20/33
CIRCUIT BOARD NO.	VEP83563A	DRAWING NO.
		KR3Y62 (20/33)
		SCM020

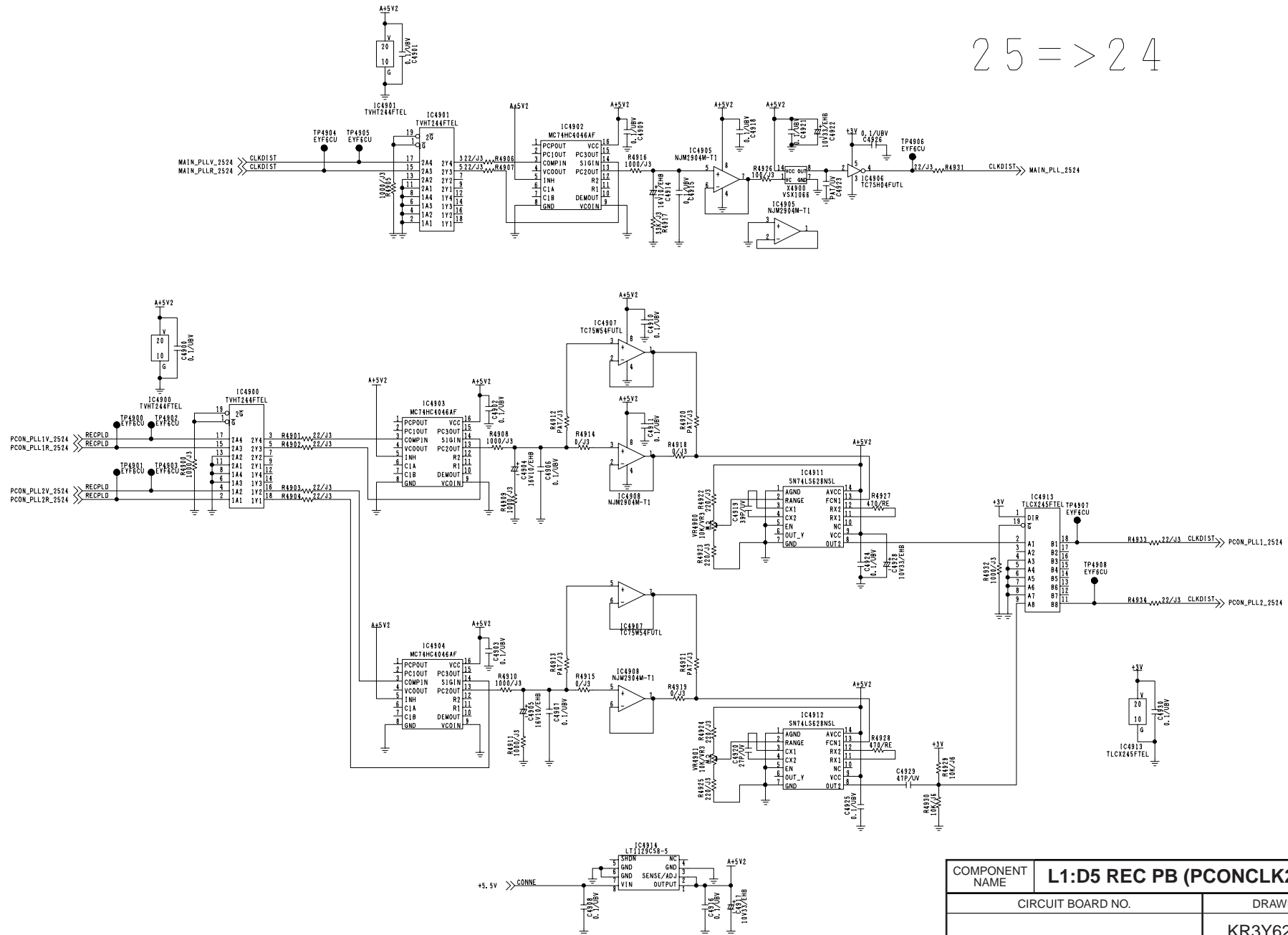


COMPONENT NAME	L1:D5 REC PB (REC_PLD)	21/33
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83563A	KR3Y62 (21/33)	
		SCM021

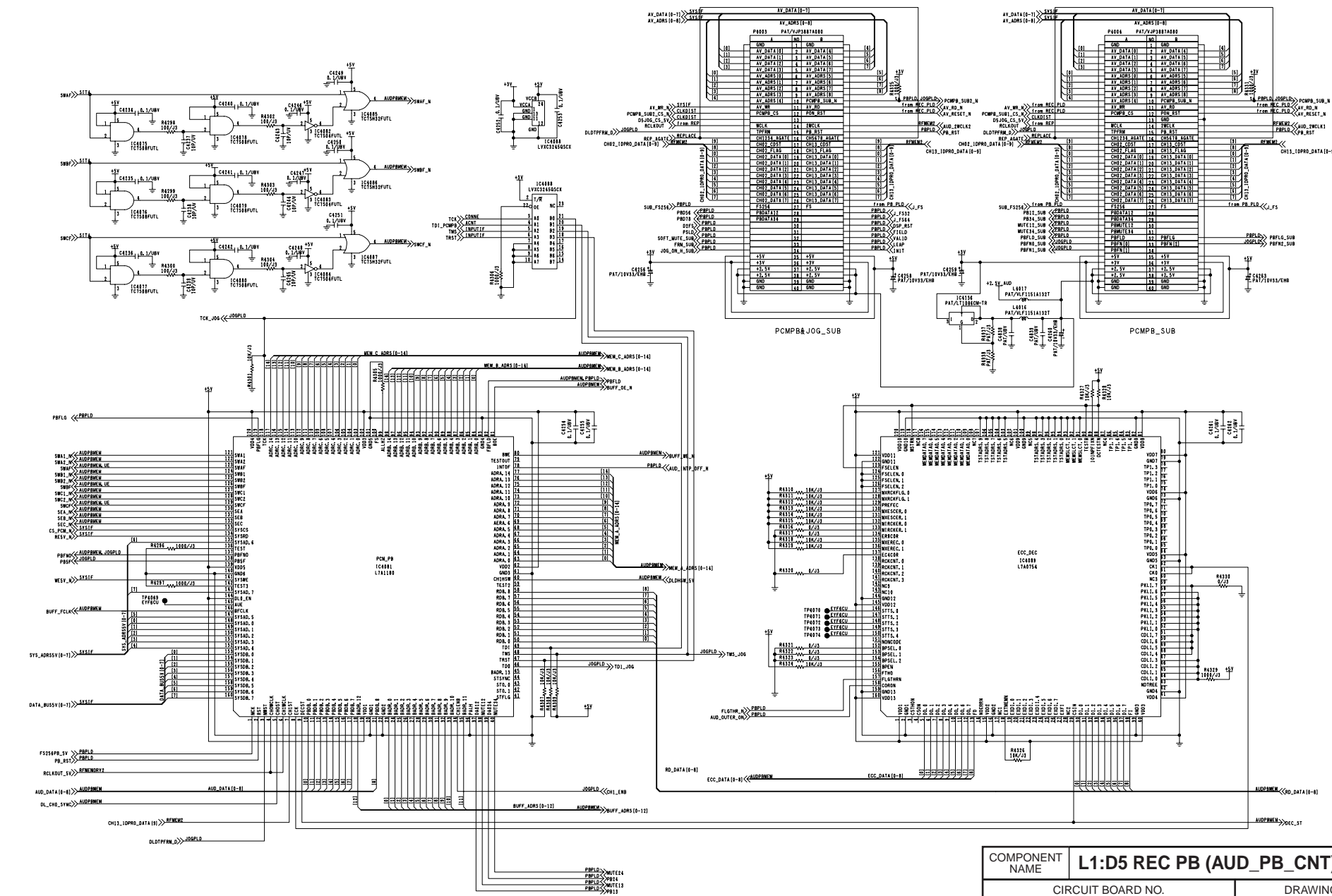


COMPONENT NAME	L1:D5 REC PB (PCONCLK)	22/33
CIRCUIT BOARD NO.		DRAWING NO.
VEP83563A		KR3Y62 (22/33)
		SCM022

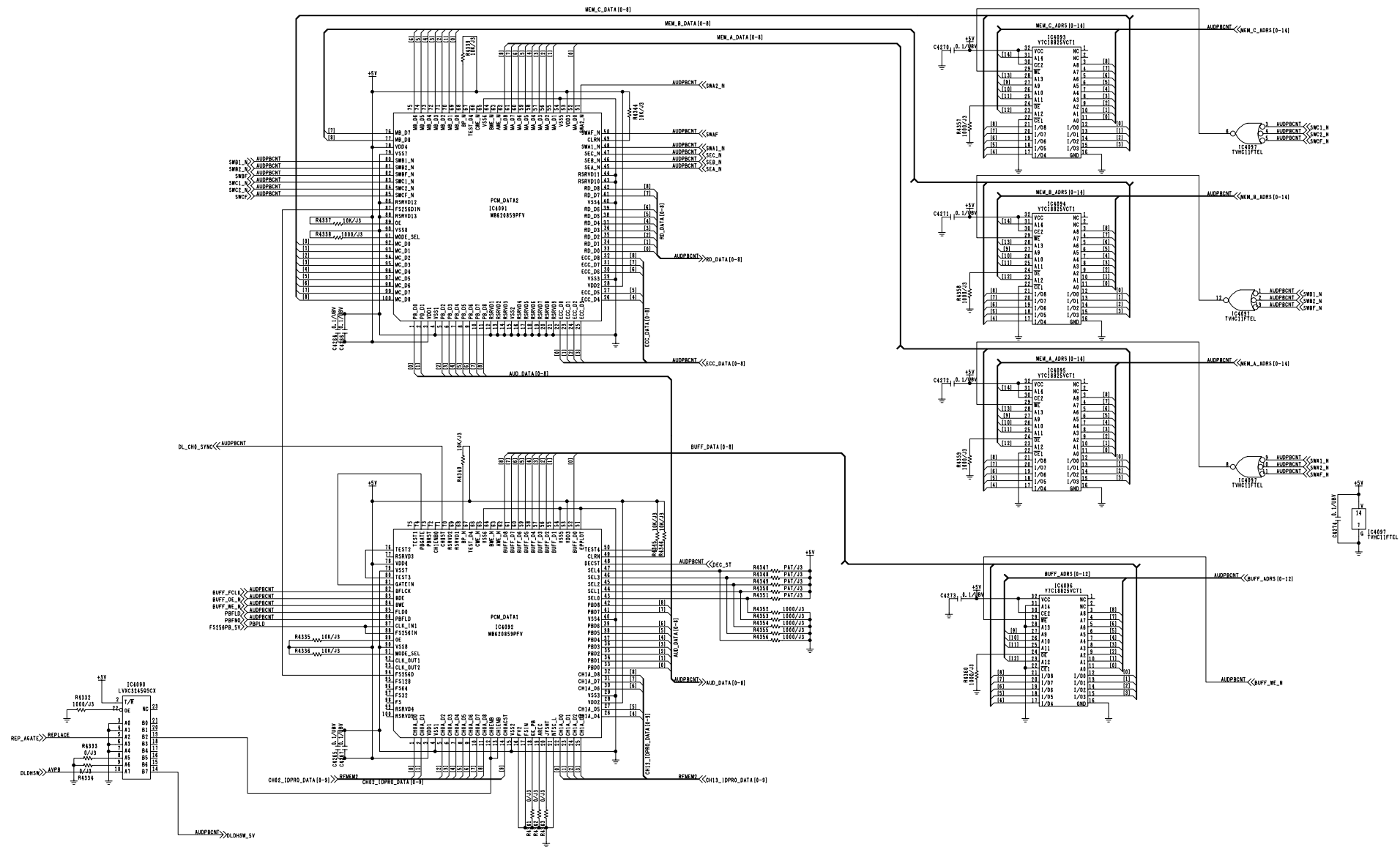
25 => 24



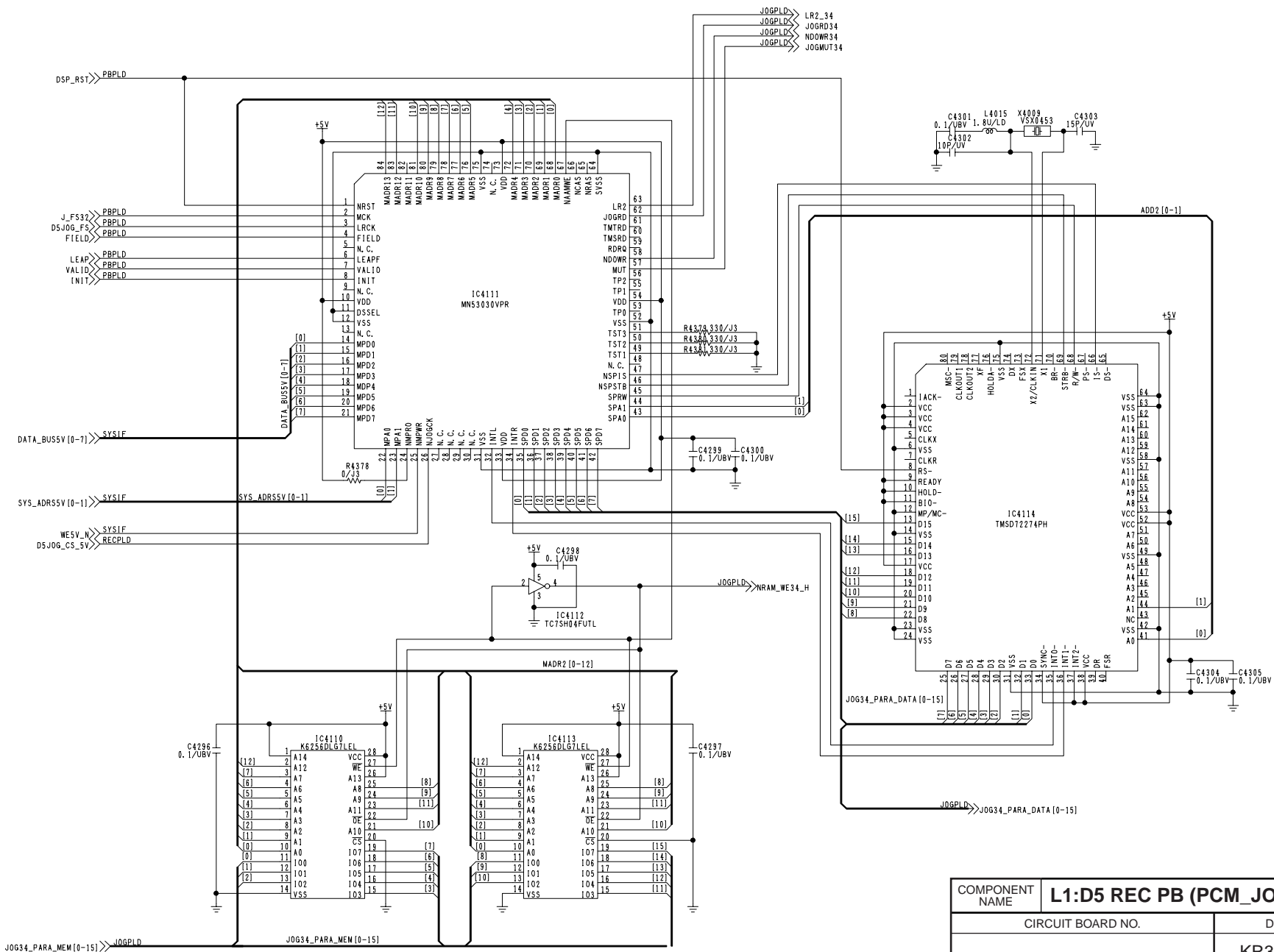
COMPONENT NAME		23/33
L1:D5 REC PB (PCONCLK2)		
CIRCUIT BOARD NO.		DRAWING NO.
VEP83563A		KR3Y62 (23/33)
		SCM023



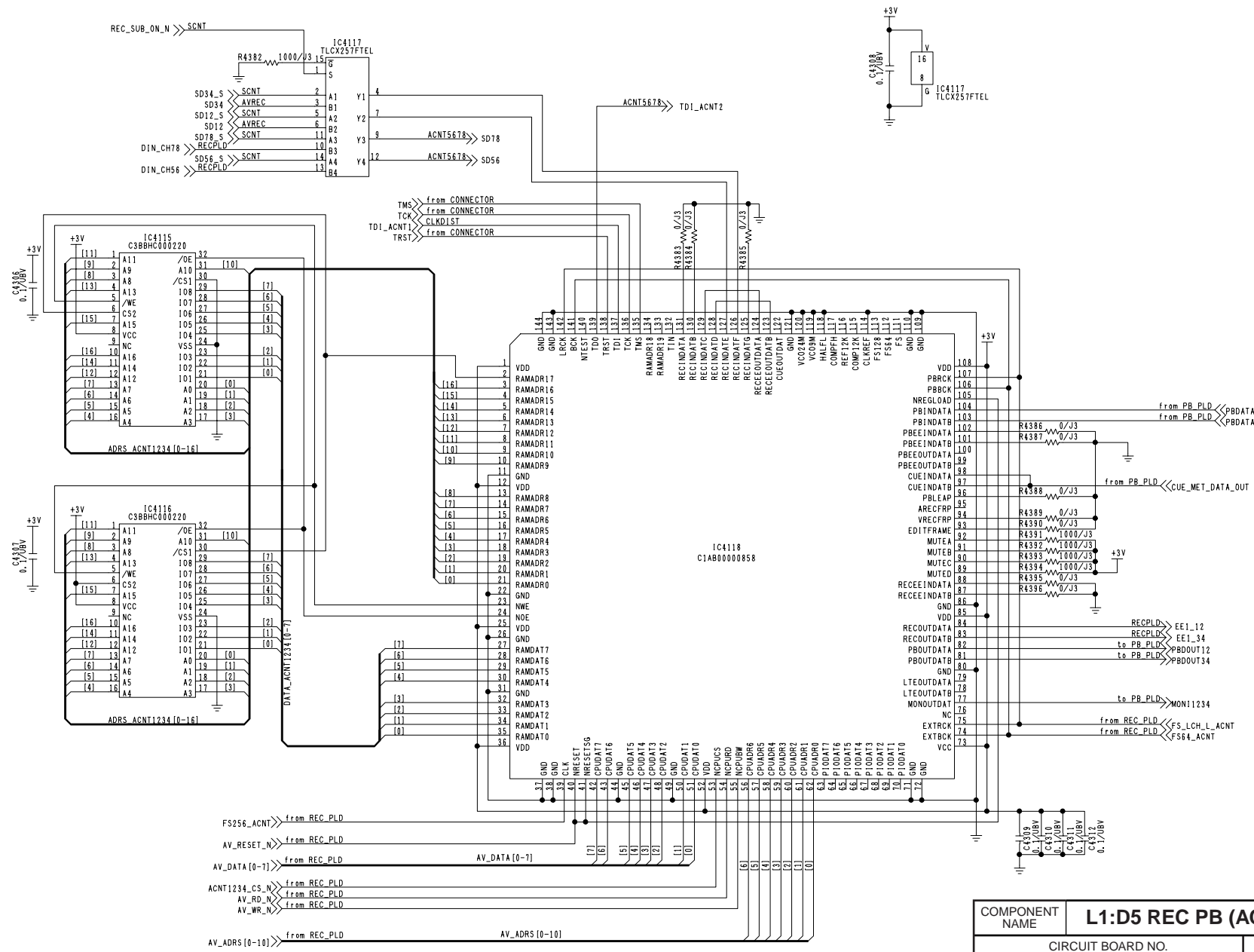
COMPONENT NAME	L1:D5 REC PB (AUD_PB_CNT)		25/33
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83563A		KR3Y62 (25/33)	
		SCM025	



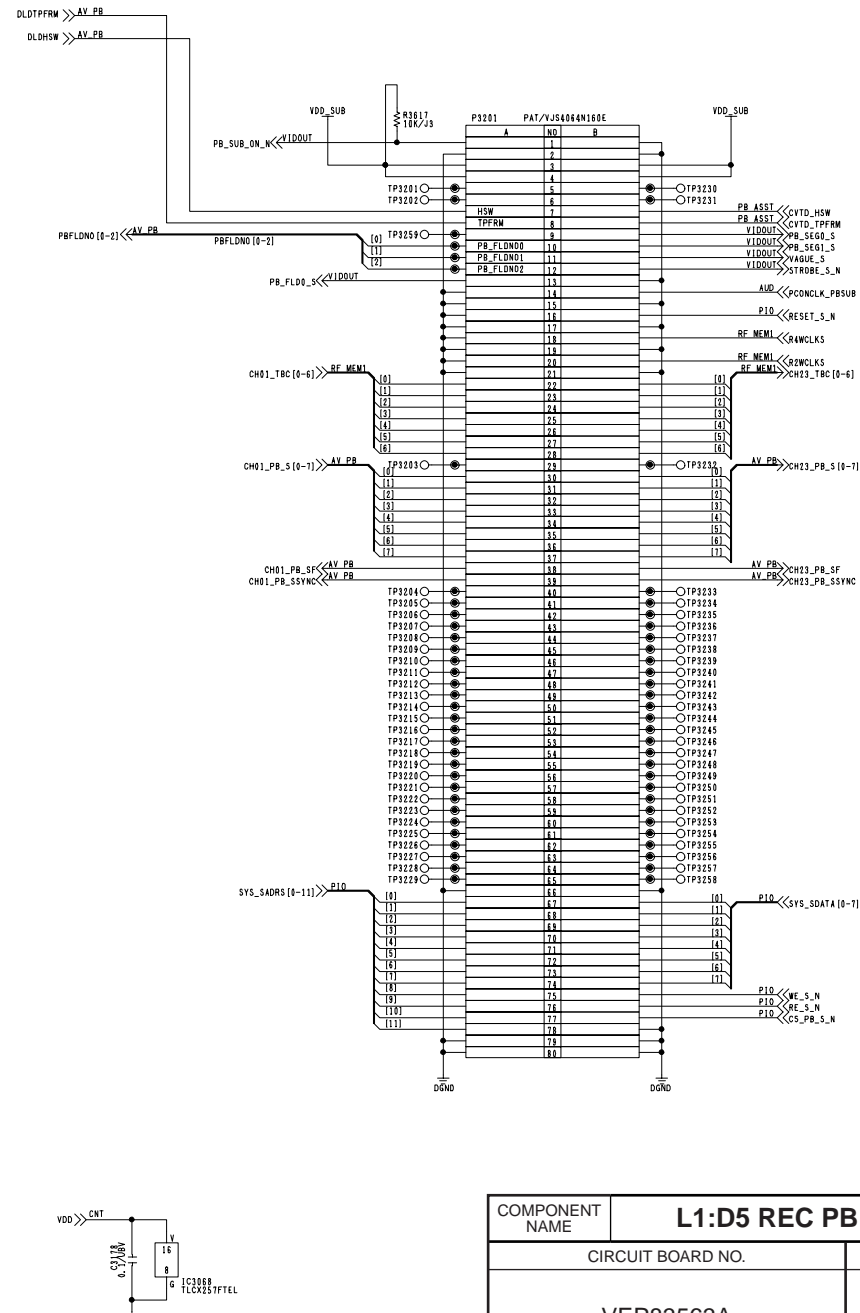
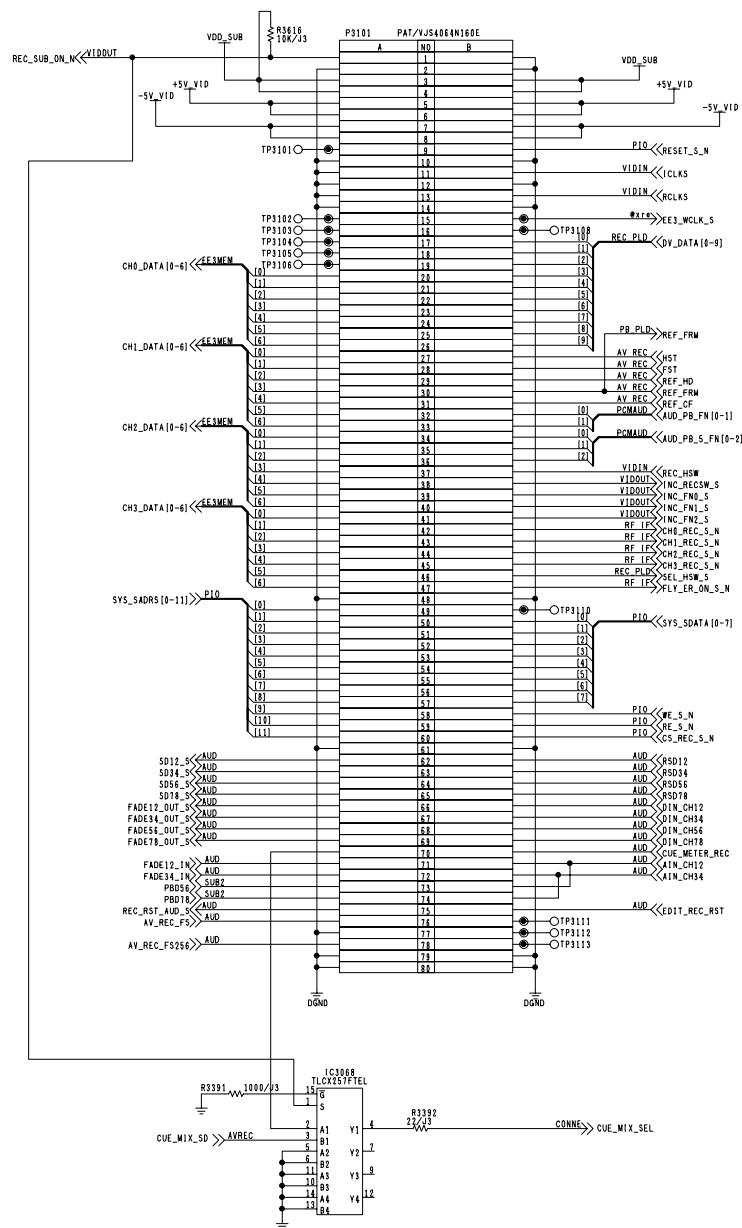
COMPONENT NAME	L1:D5 REC PB (AUD_PB_MEM)	26/33
CIRCUIT BOARD NO.	VEP83563A	DRAWING NO.
		KR3Y62 (26/33)
		SCM026



COMPONENT NAME	L1:D5 REC PB (PCM_JOG34)	29/33
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83563A	KR3Y62 (29/33)	
	SCM029	



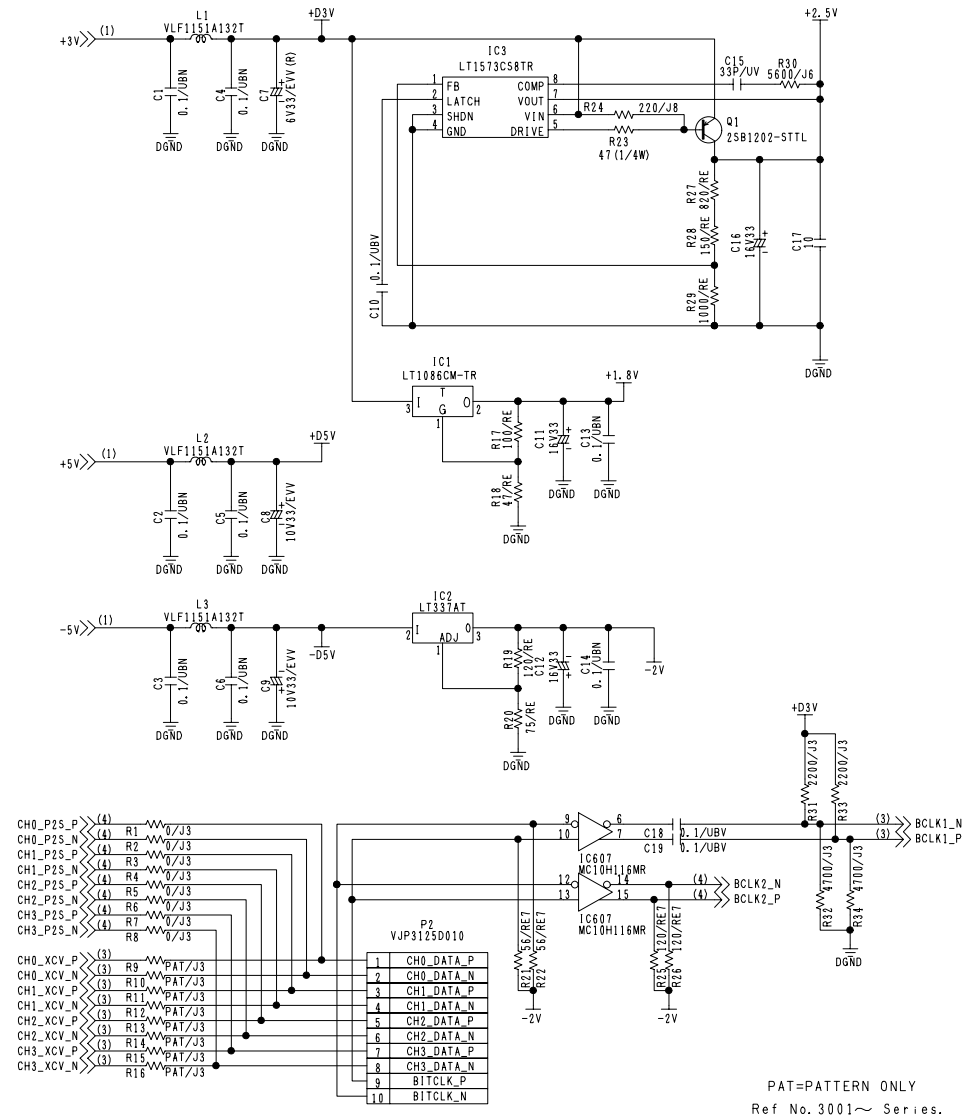
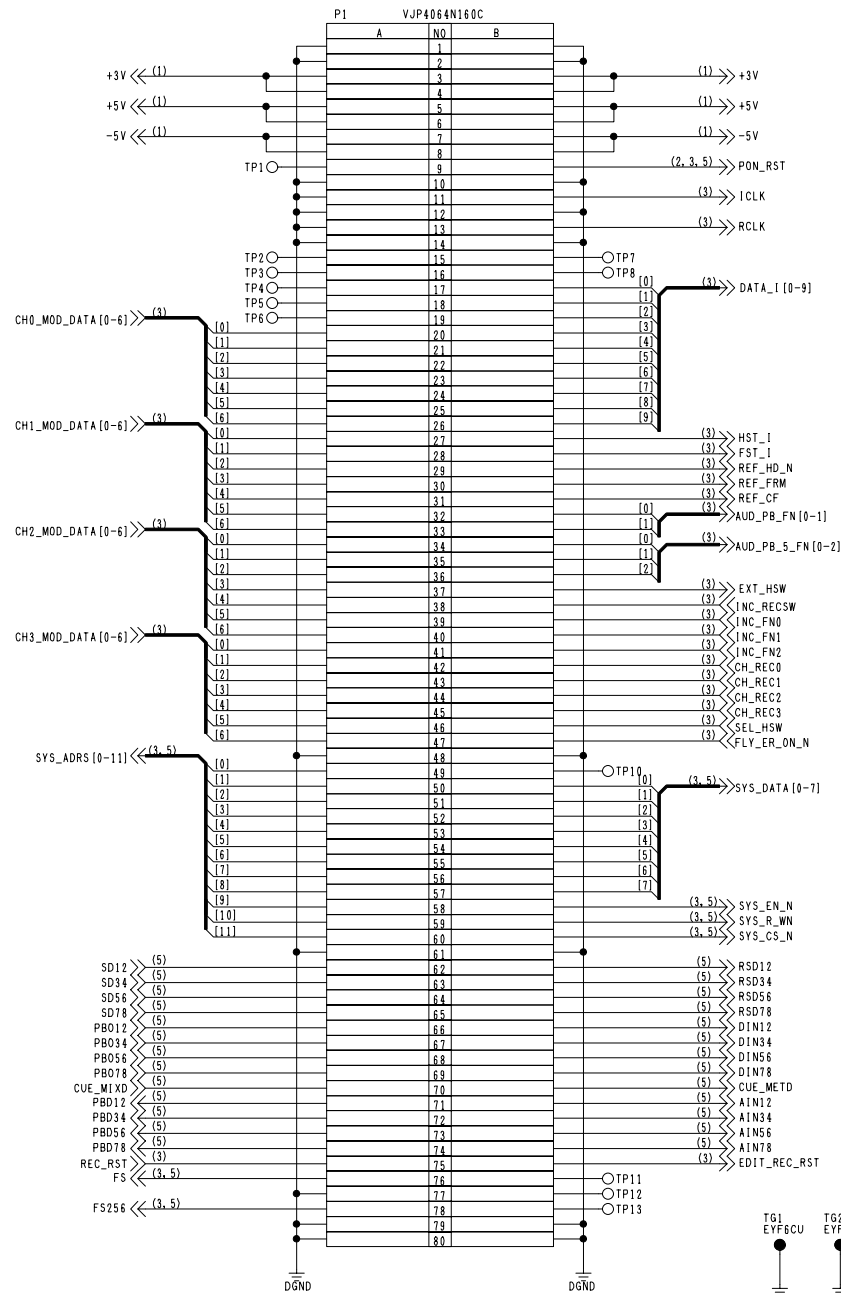
COMPONENT NAME	L1:D5 REC PB (ACNT1234)	30/33
CIRCUIT BOARD NO.		DRAWING NO.
VEP83563A		KR3Y62 (30/33)
		SCM030



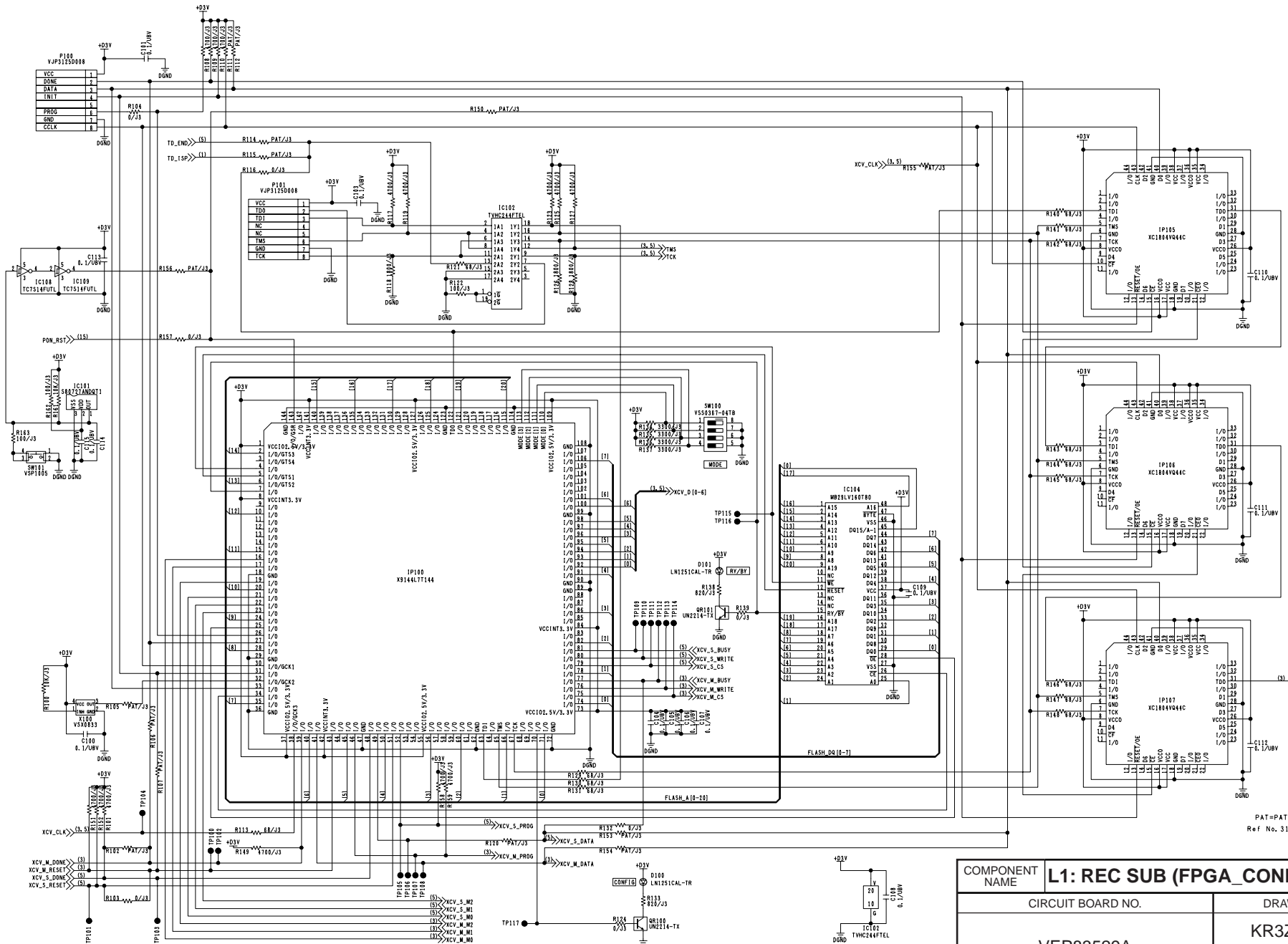
COMPONENT NAME	L1:D5 REC PB (SNT)		33/33
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83563A		KR3Y62 (33/33)	
		SCM033	



COMPONENT NAME	L1: PCM PB SUB (PCMPB)		01/02
CIRCUIT BOARD NO.		DRAWING NO.	
VEP84373A/B		KR4K03 (1/2)	
		SCM034	

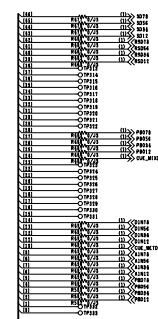


COMPONENT NAME	L1: REC SUB (CONNECTOR)	01/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83529A	KR3Z78 (1/5)	
	SCM036	



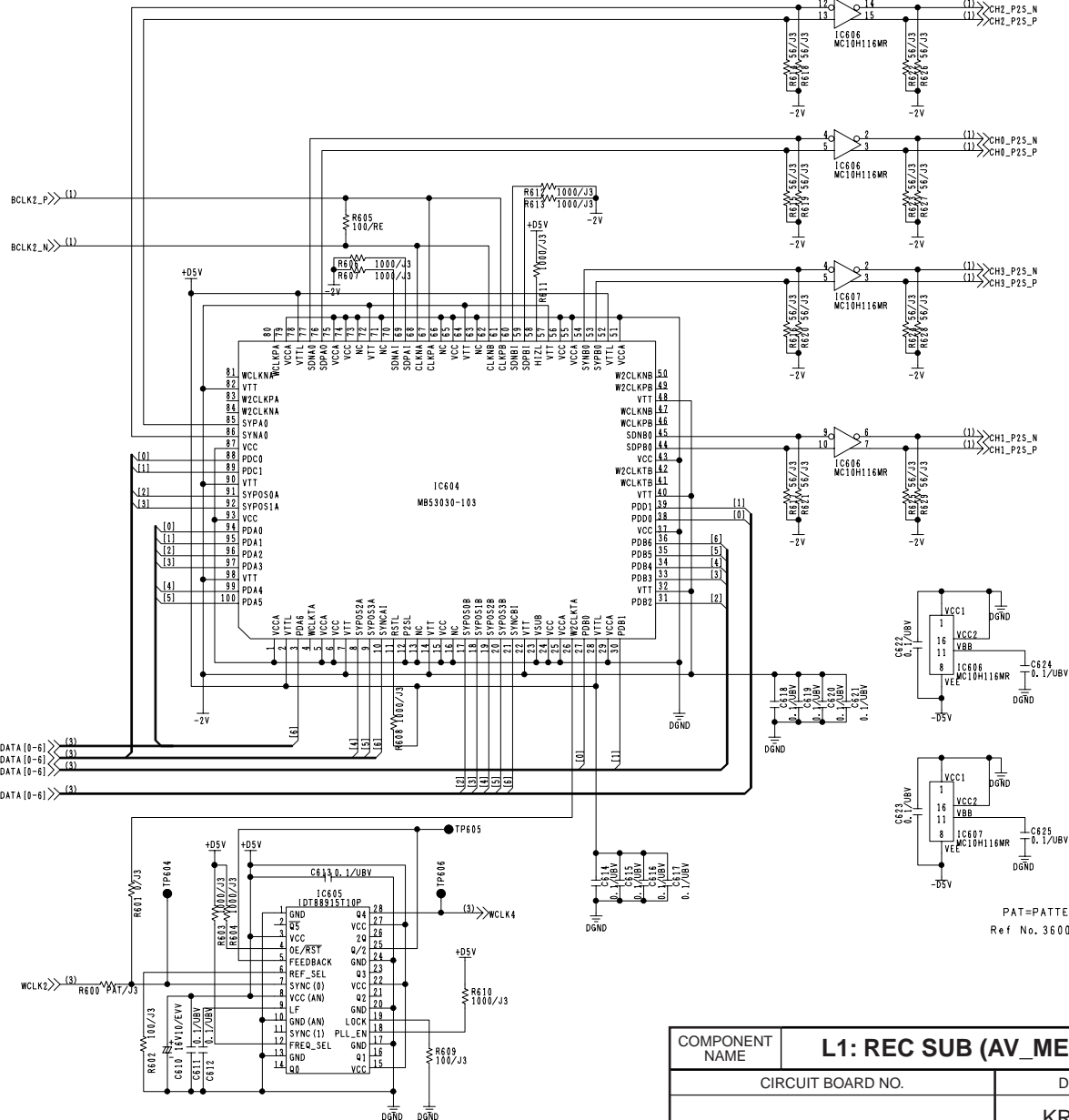
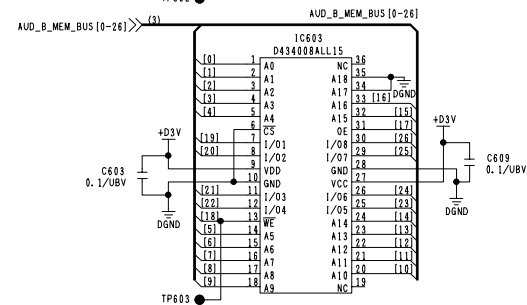
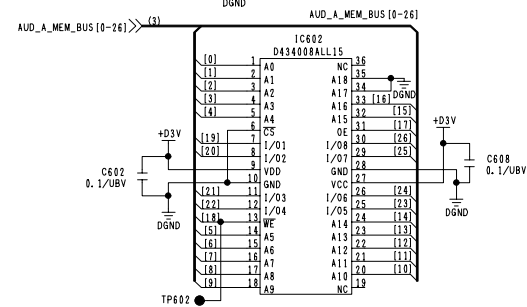
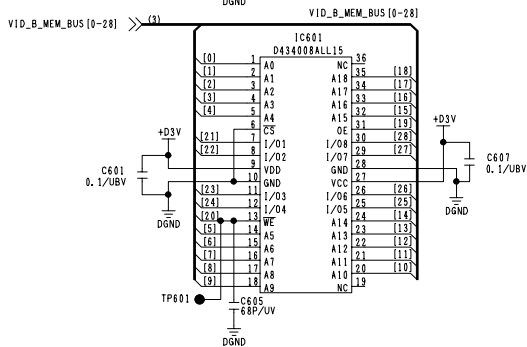
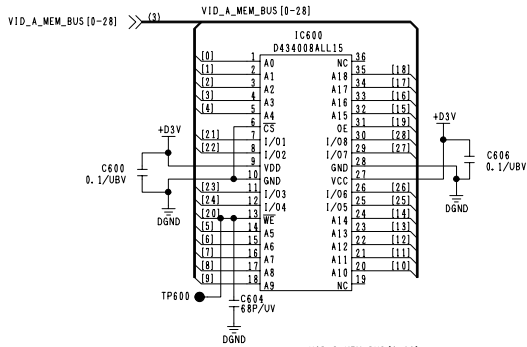
COMPONENT NAME		L1: REC SUB (FPGA_CONFIG)	02/05
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83529A		KR3Z78 (2/5)	
		SCM037	

PAT=PATTERN ONLY
Ref No.3100~ Series.



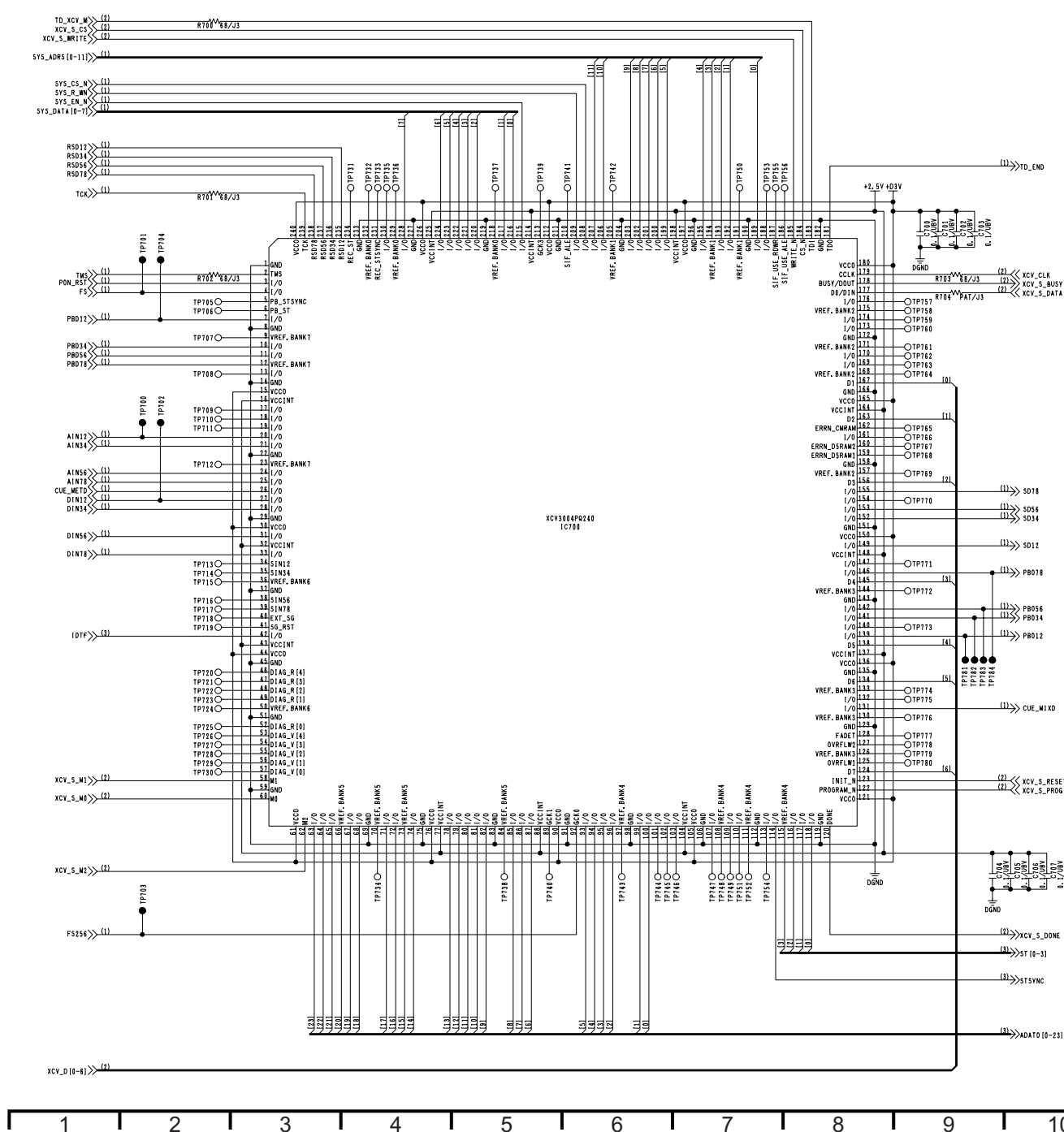
COMPONENT NAME	L1: REC SUB (REC_MAIN)		03/05
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83529A		KR3Z78 (3/5)	
		SCM038	

A vertical scale from 0 to 10. The scale is represented by a vertical line with horizontal tick marks. The labels A through J are placed to the right of the tick marks, corresponding to the values 1 through 10. The label 0 is at the bottom, and 10 is at the top.



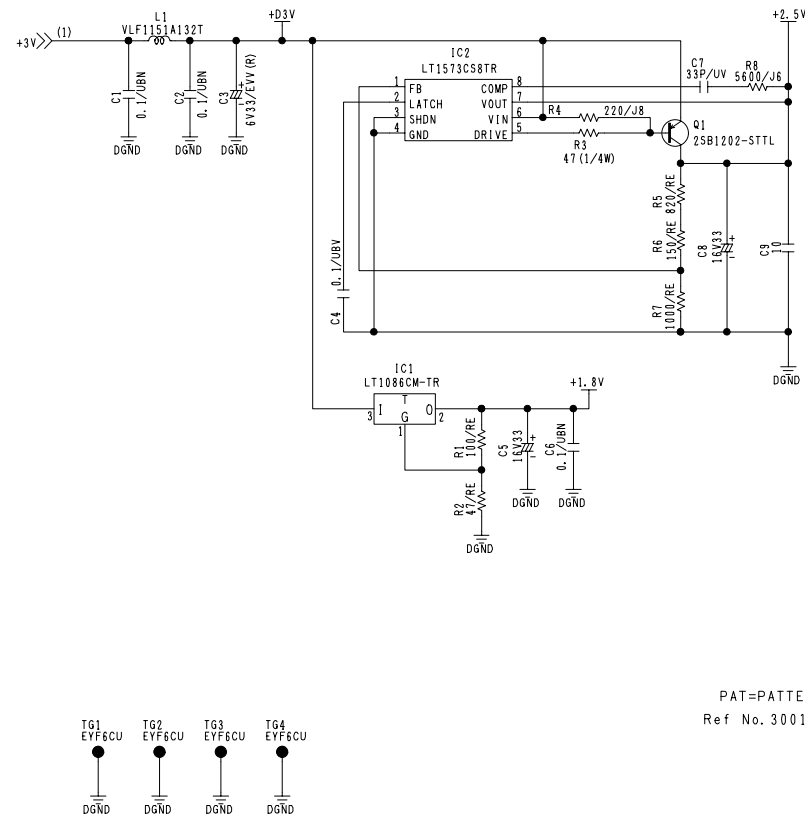
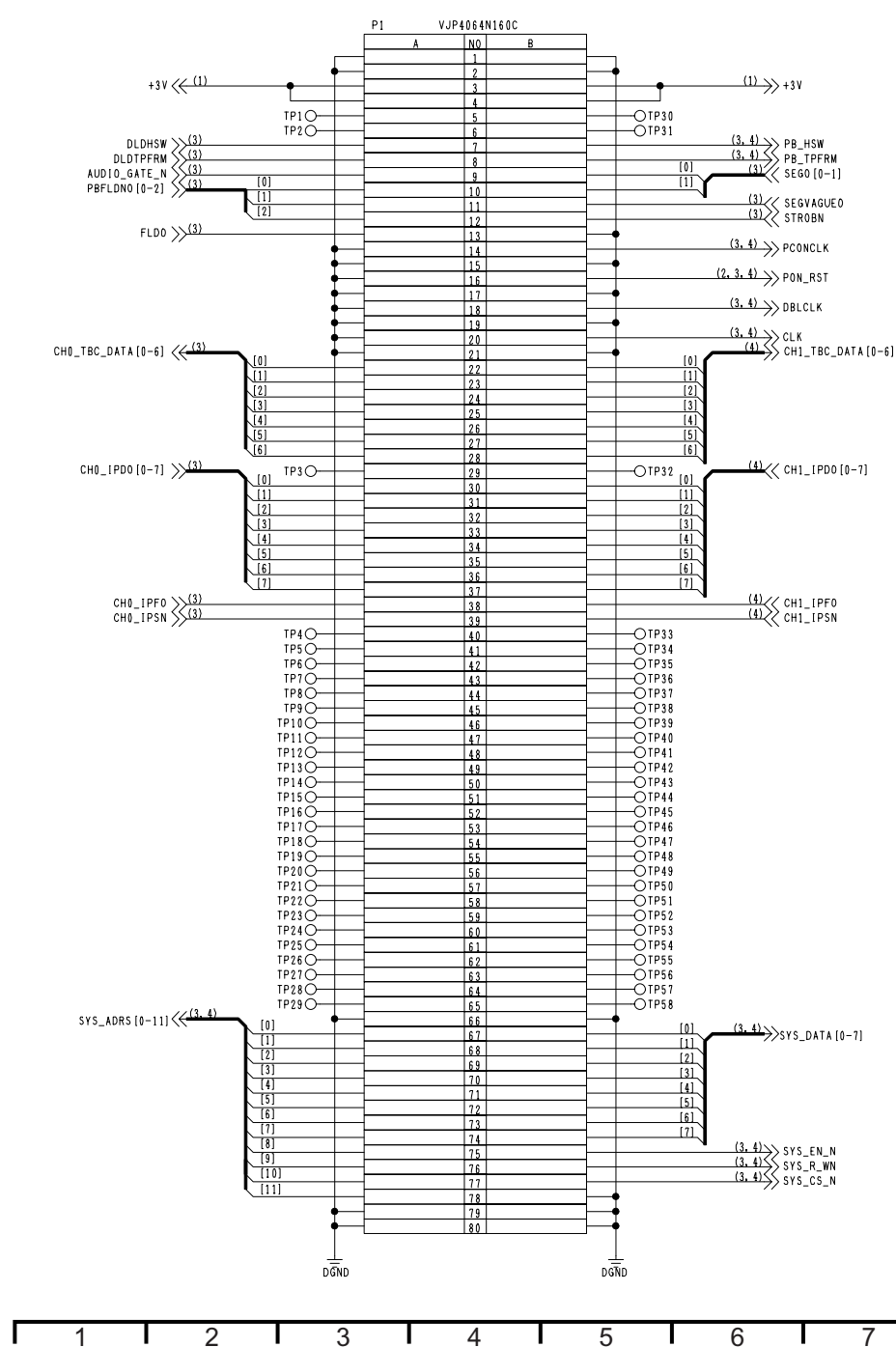
PAT= PATTERN ONLY
Ref No. 3600 ~ Series.

COMPONENT NAME	L1: REC SUB (AV_MEM)	04/05
CIRCUIT BOARD NO.	VEP83529A	DRAWING NO.
		KR3Z78 (4/5)
		SCM039



PAT=PATTERN ONLY
Ref No.3600~ Series.

COMPONENT NAME	L1: REC SUB (AUCH)	05/05
CIRCUIT BOARD NO.	VEP83529A	DRAWING NO.
		KR3Z78 (5/5)
		SCM040



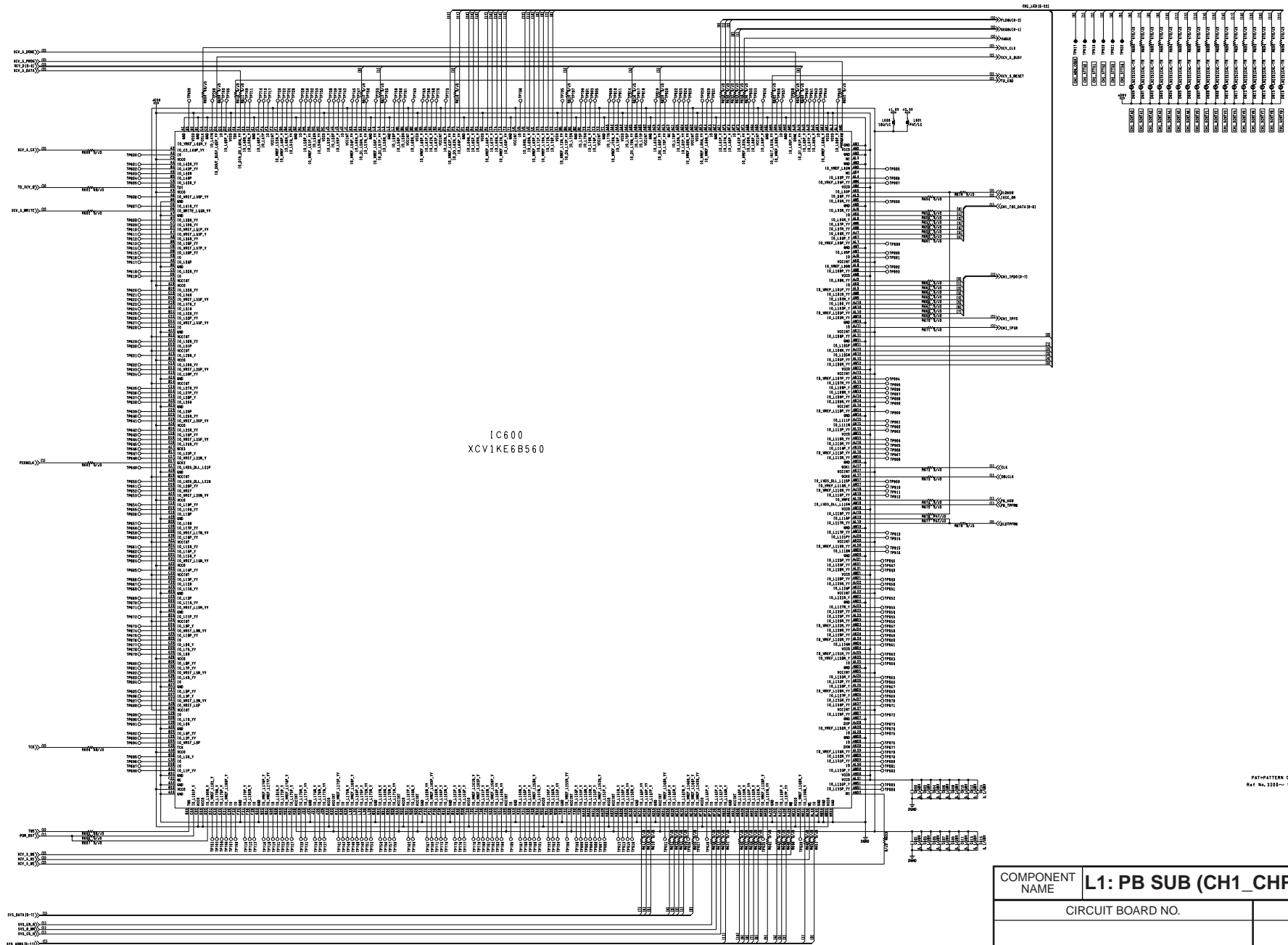
PAT=PATTERN ONLY
Ref No. 3001~ Series.

COMPONENT NAME	L1: PB SUB (CONNECTOR)	01/04
CIRCUIT BOARD NO.	VEP83530A	DRAWING NO.
		KR3Z79 (1/4)
		SCM041



COMPONENT NAME	L1: PB SUB (CH0_CHPB, ECC)		03/04
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83530A		KR3Z79 (3/4)	
		SCM043	

CH1_LAMP 10-101



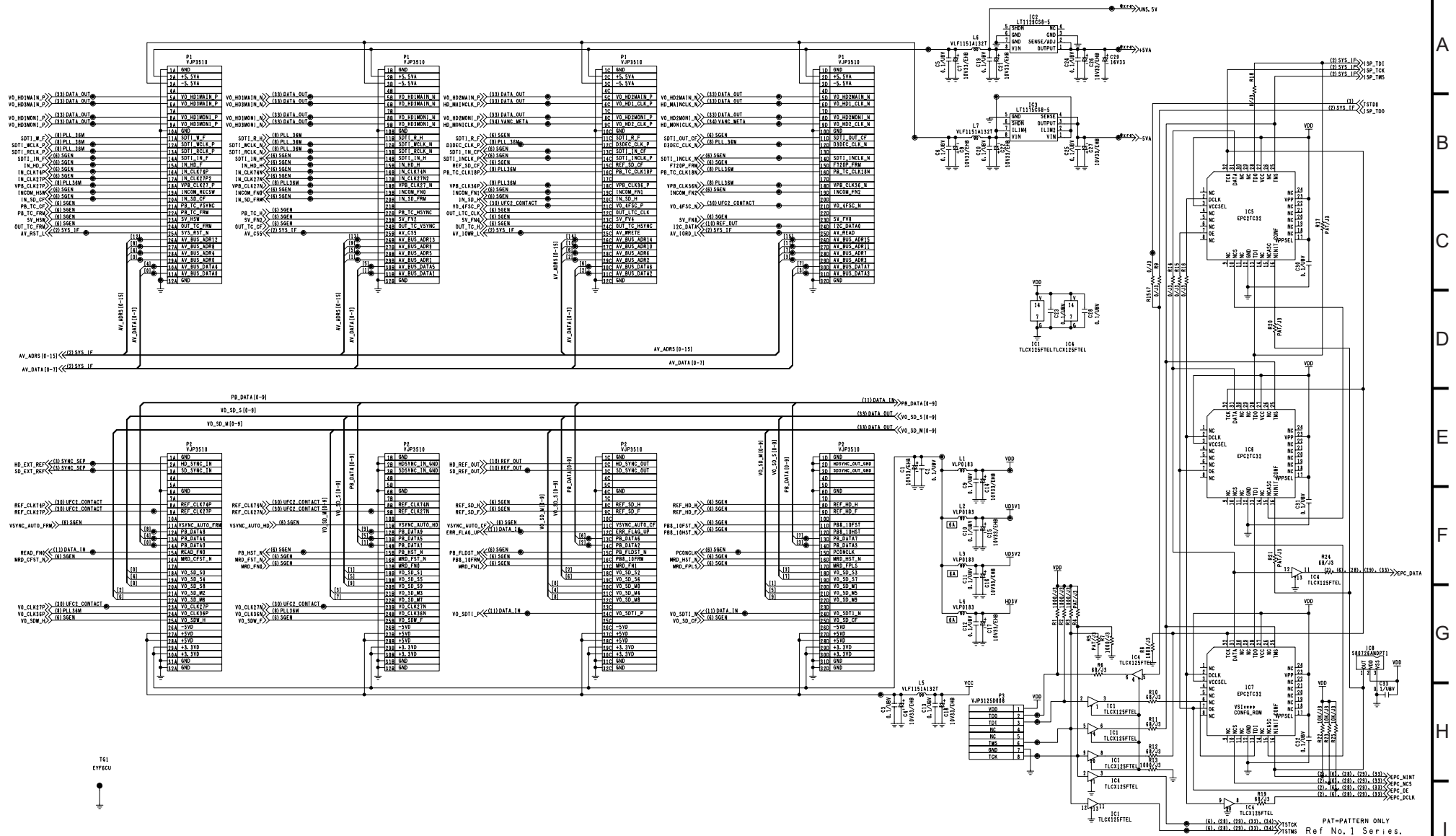
IC600
XCV1KE6B560

PATH-PATTERN ONLY
Ref No. 2009- Series

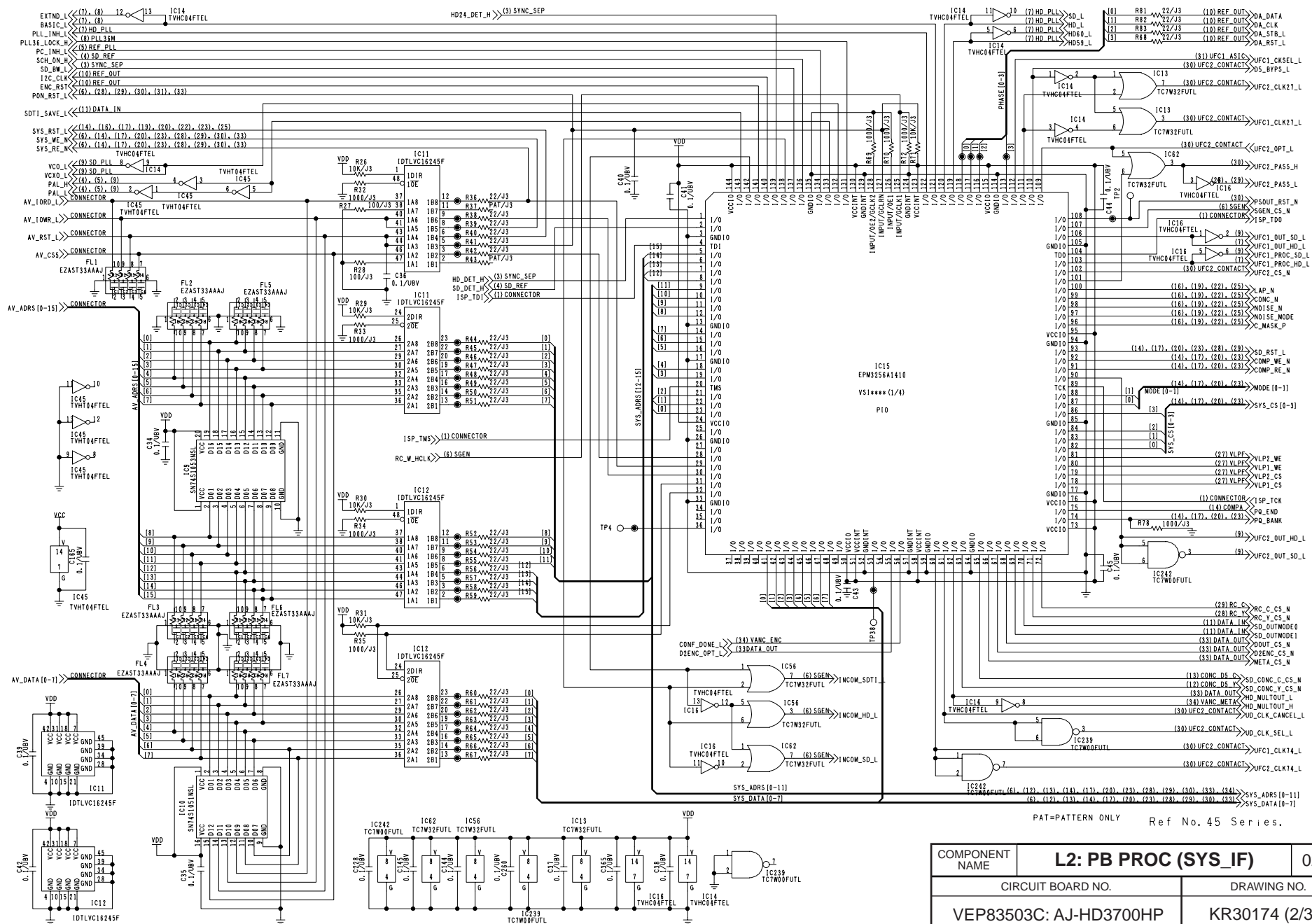
COMPONENT NAME	L1: PB SUB (CH1_CHPB, ECC)		04/04
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83530A		KR3Z79 (4/4)	
		SCM044	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

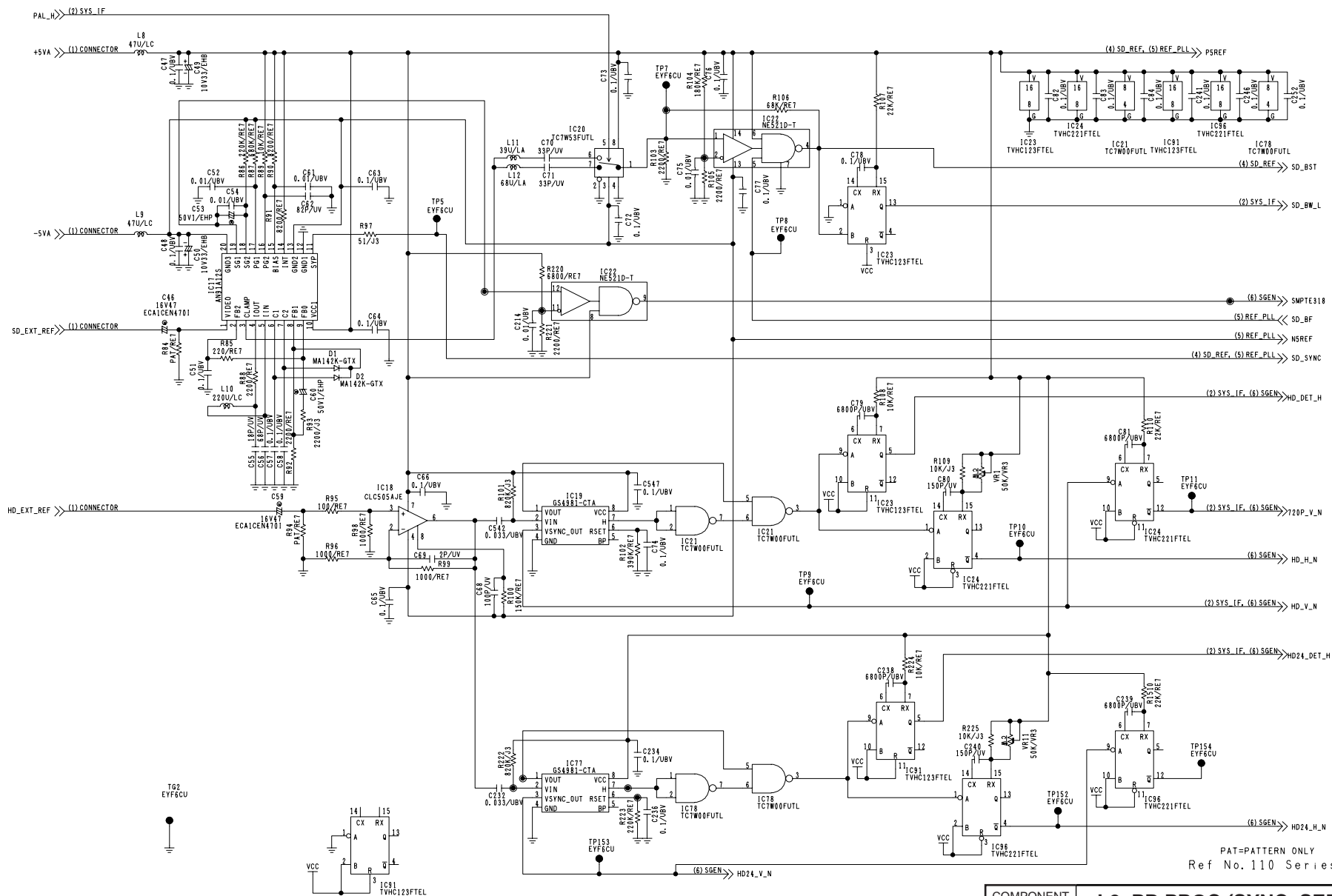
A
B
C
D
E
F
G
H
I
J



COMPONENT NAME		L2: PB PROC (CONNECTOR)		01/34
CIRCUIT BOARD NO.		DRAWING NO.		
VEP83503C: AJ-HD3700HP		KR30174 (1/34)		
VEP83503A: AJ-HD3700HE		SCM045		

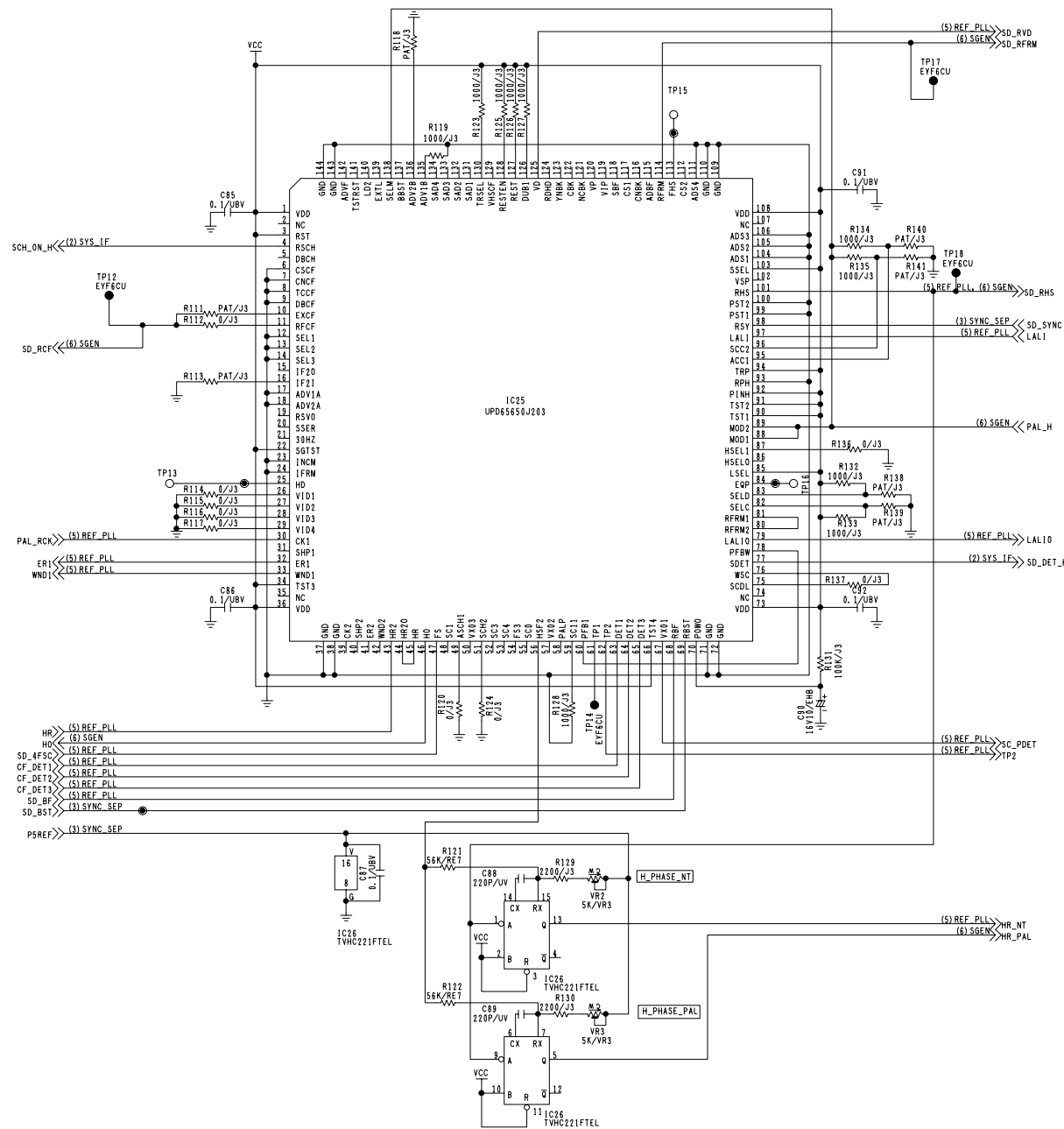


PAT=Pattern Only Ref No.45 Series.



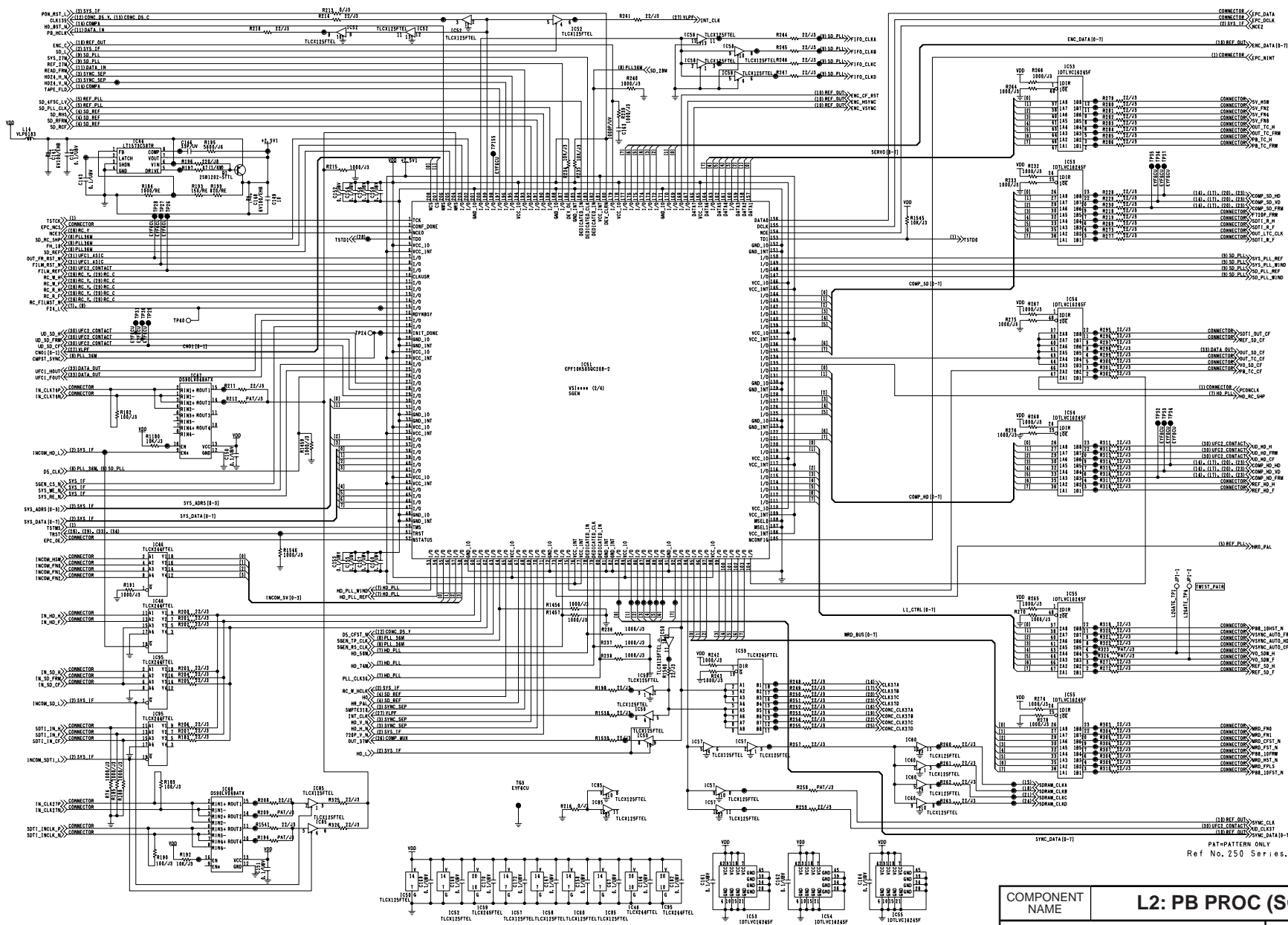
COMPONENT NAME	L2: PB PROC (SYNC_SEP)	03/34
CIRCUIT BOARD NO.	VEP83503C: AJ-HD3700HP VEP83503A: AJ-HD3700HE	DRAWING NO. KR30174 (3/34)
		SCM047

PAT= PATTERN ONLY
Ref No. 110 Series.



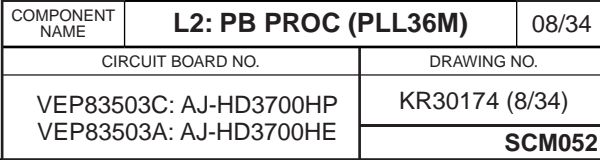
PAT=PATTERN ONLY
Ref No. 155 Series.

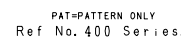
COMPONENT NAME	L2: PB PROC (SD_REF)	04/34
CIRCUIT BOARD NO.		DRAWING NO.
VEP83503C: AJ-HD3700HP		KR30174 (4/34)
VEP83503A: AJ-HD3700HE		SCM048



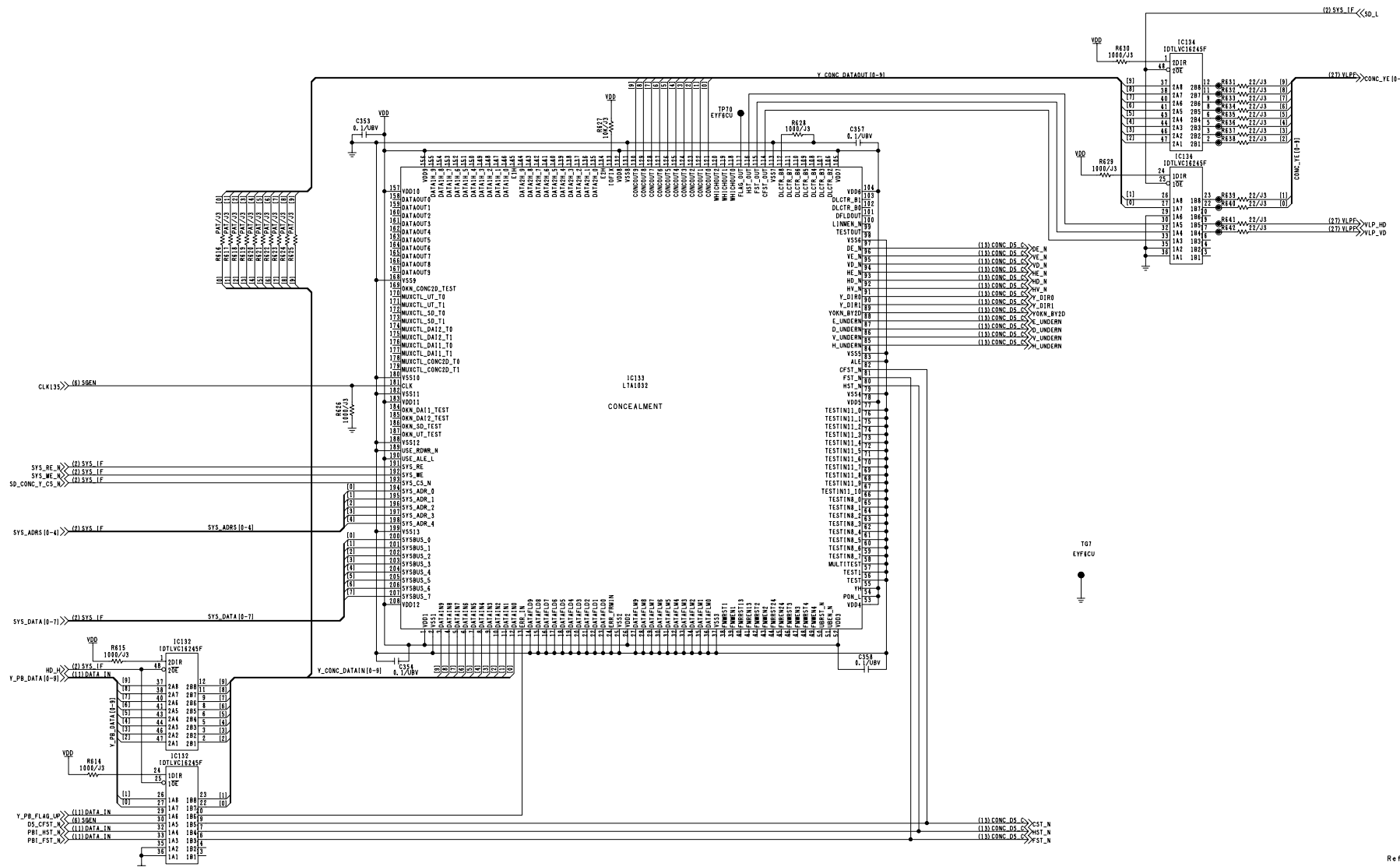
COMPONENT NAME	L2: PB PROC (SGEN)	06/34
CIRCUIT BOARD NO.	VEP83503C: AJ-HD3700HP VEP83503A: AJ-HD3700HE	DRAWING NO. KR30174 (6/34)
		SCM050

Ref No. 250 Series.





COMPONENT NAME	L2: PB PROC (SD_PLL)		09/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP VEP83503A: AJ-HD3700HE		KR30174 (9/34)	
		SCM053	

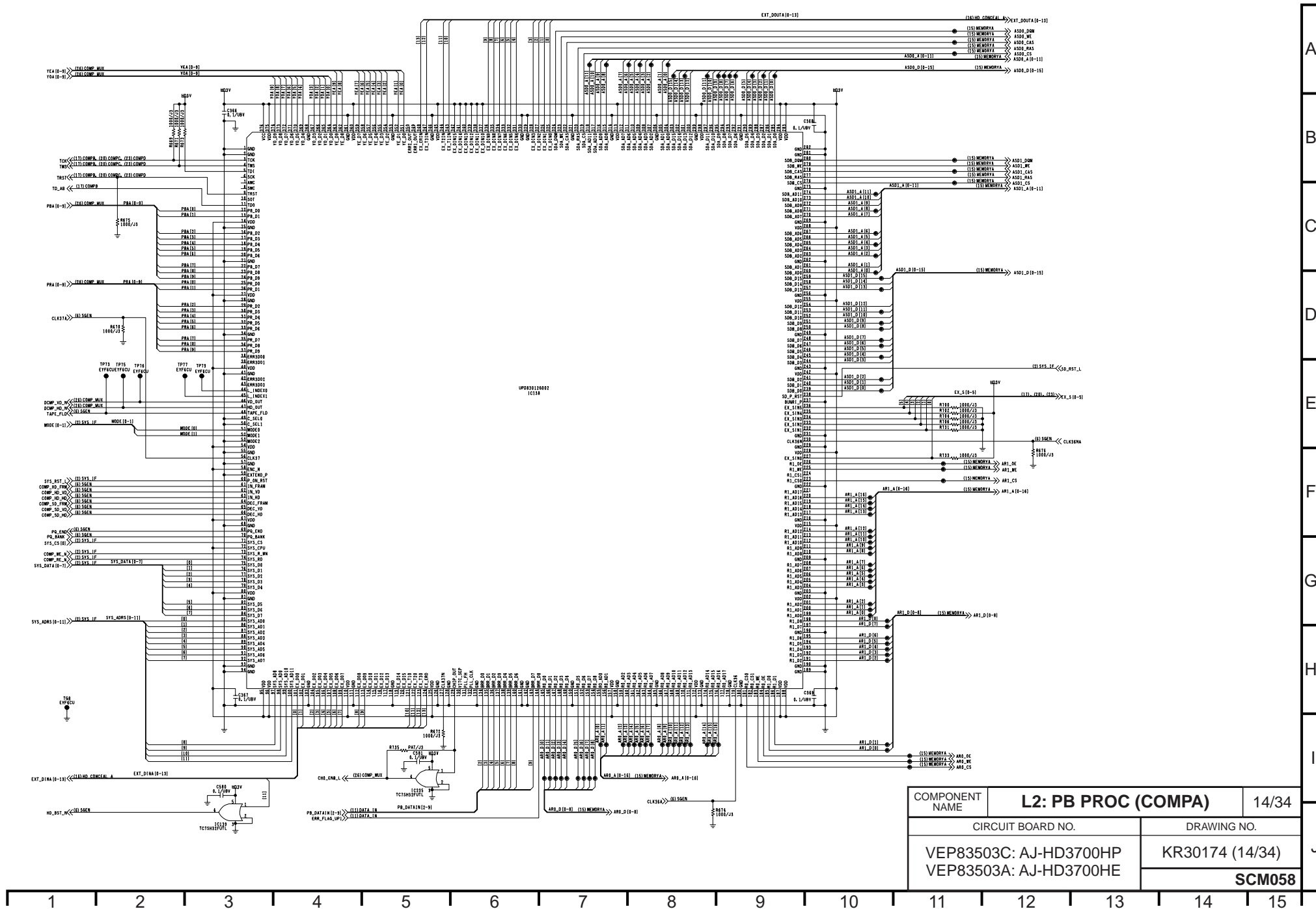


Ref No. Series.

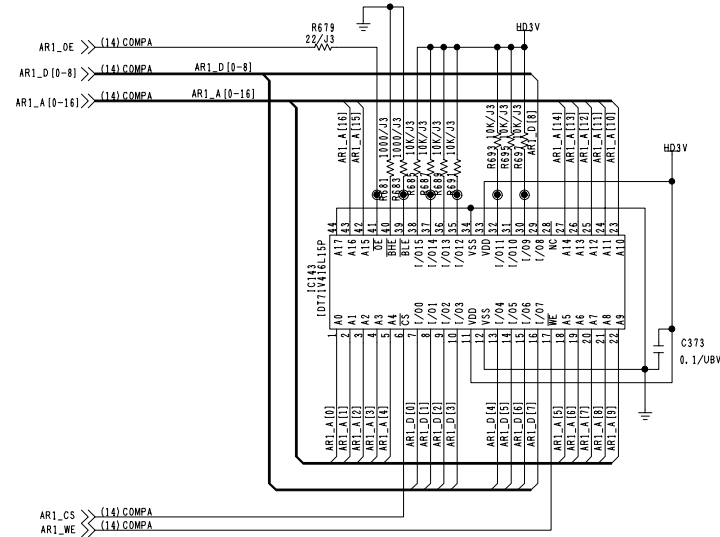
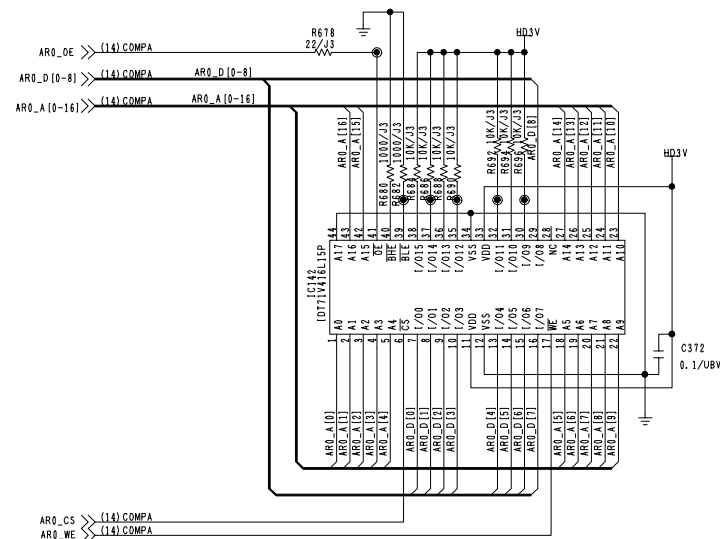
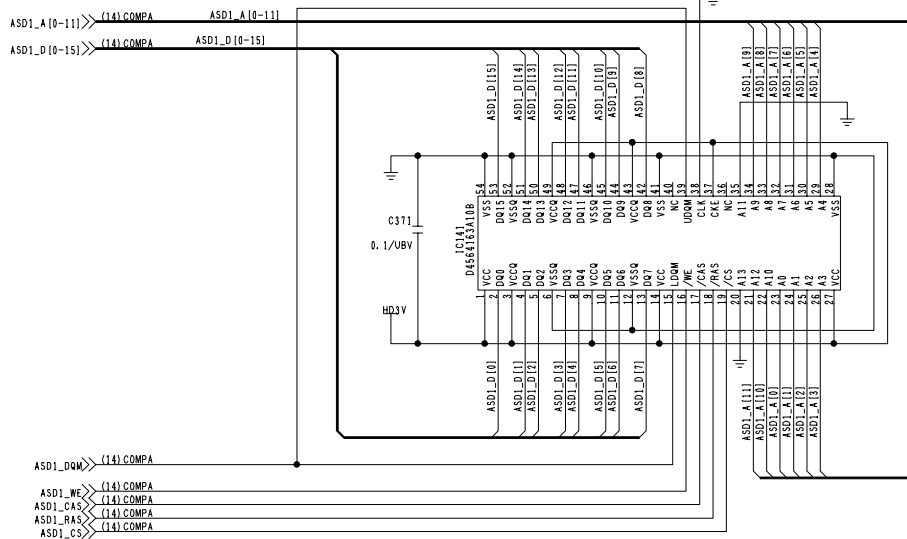
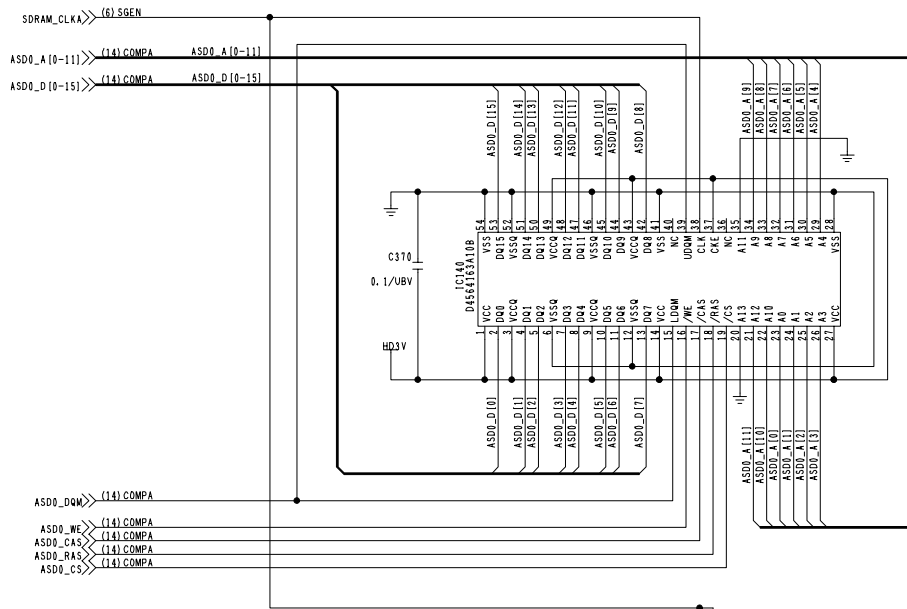
COMPONENT NAME	L2: PB PROC (CONC_D5_Y)		12/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (12/34)	
VEP83503A: AJ-HD3700HE		SCM056	



COMPONENT NAME	L2: PB PLOCK (CONC_D5_C)		13/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (13/34)	
VEP83503A: AJ-HD3700HE		SCM057	

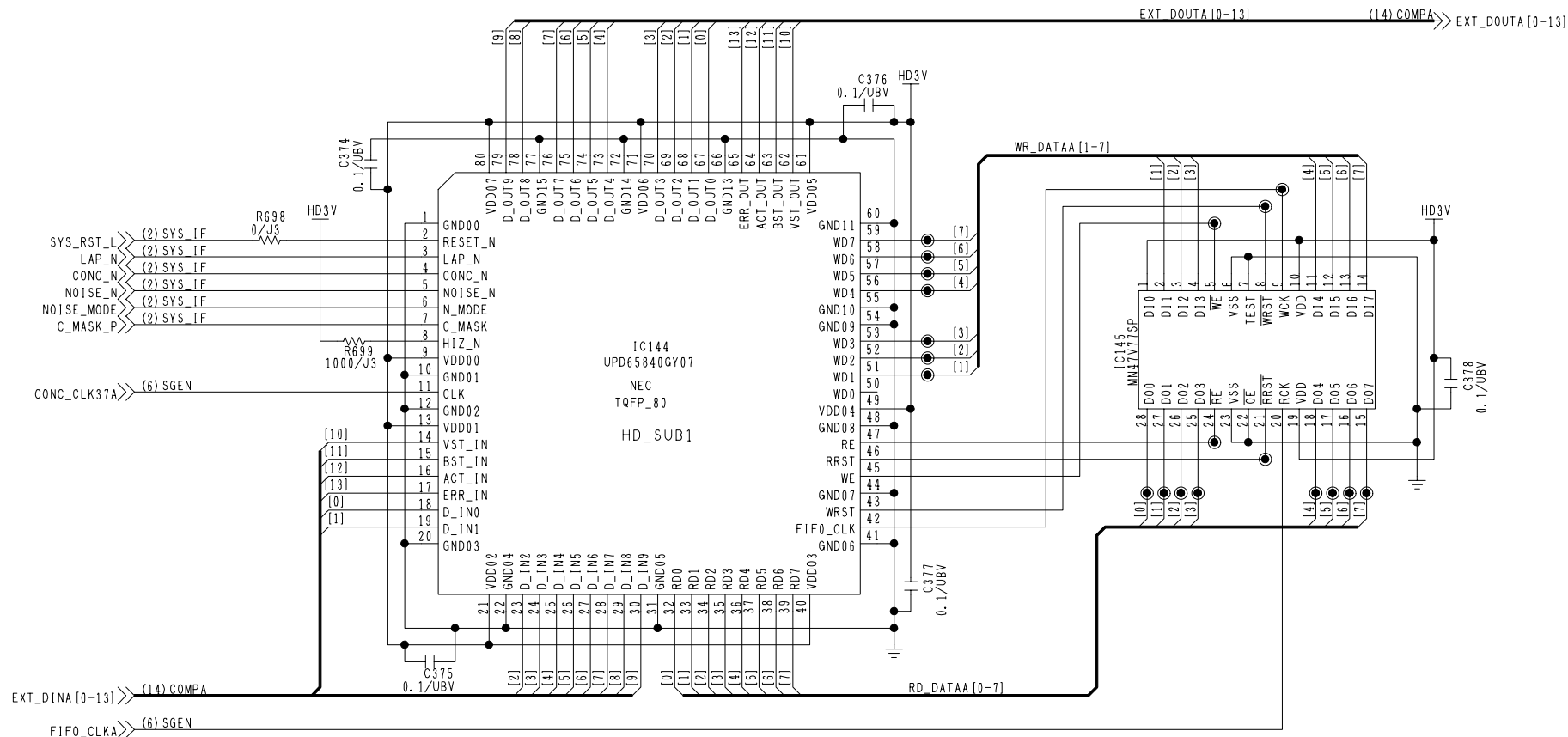


COMPONENT NAME	L2: PB PROC (COMP A)	14/34
CIRCUIT BOARD NO.	VEP83503C: AJ-HD3700HP VEP83503A: AJ-HD3700HE	DRAWING NO. KR30174 (14/34)
		SCM058



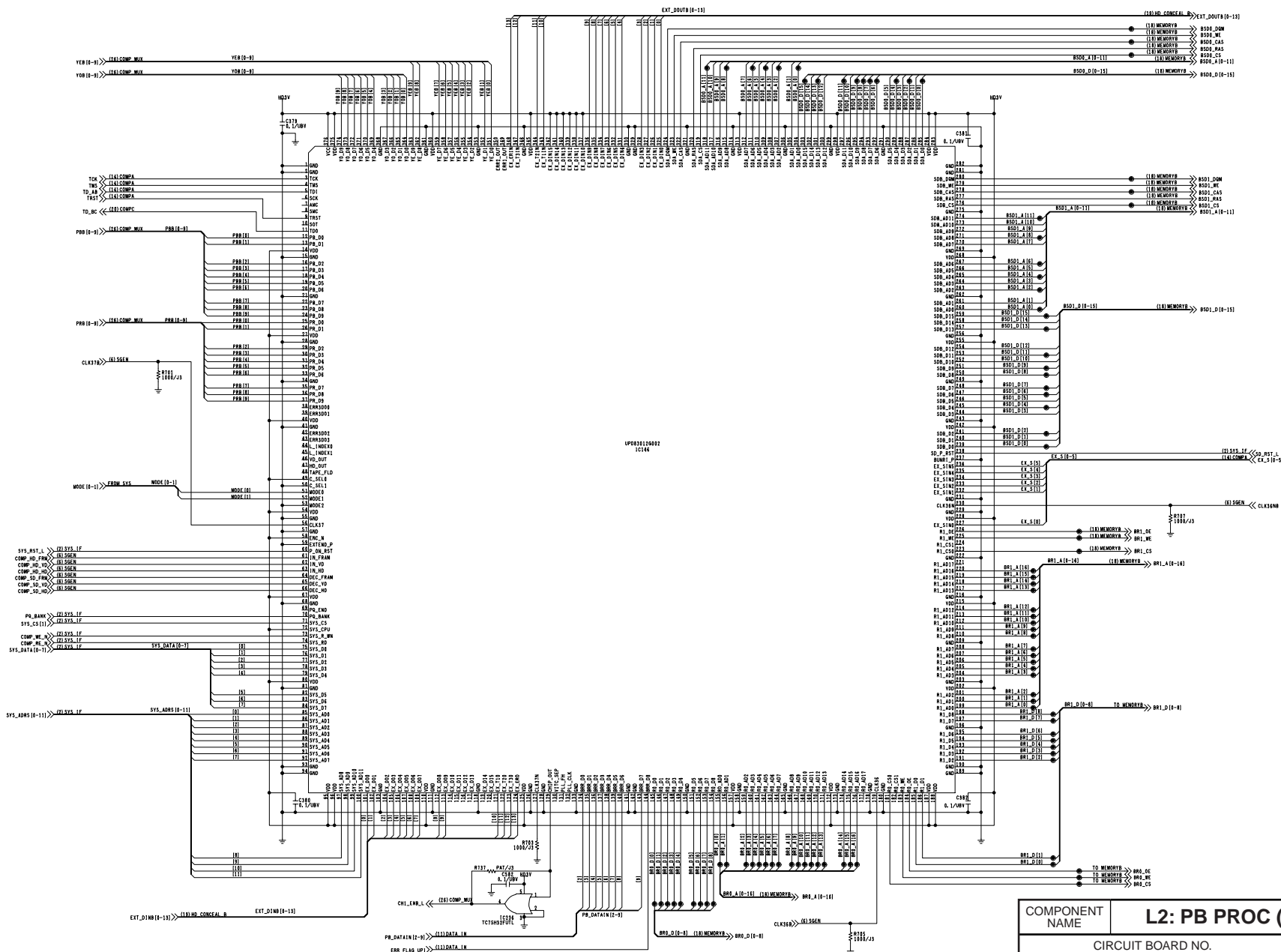
COMPONENT NAME		L2: PB PROC (MEMORY A)	15/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (15/34)	
VEP83503A: AJ-HD3700HE		SCM059	

A
B
C
D
E
F
G
H
I
J

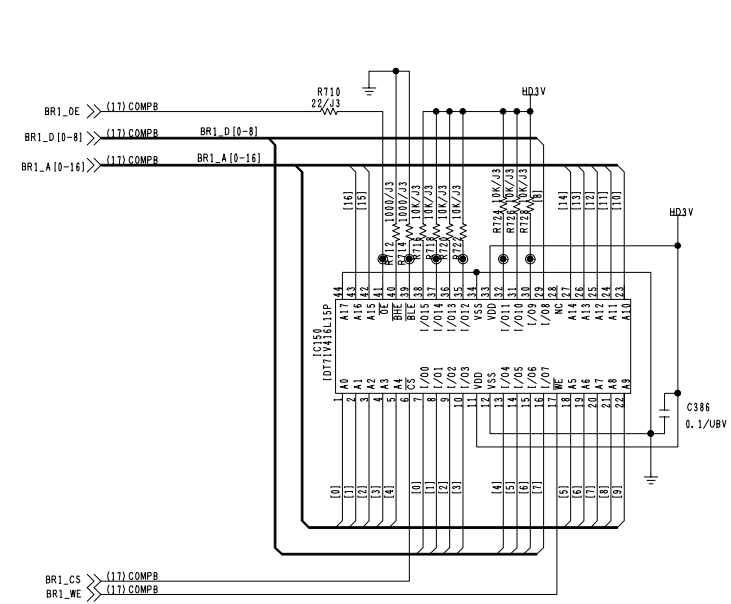
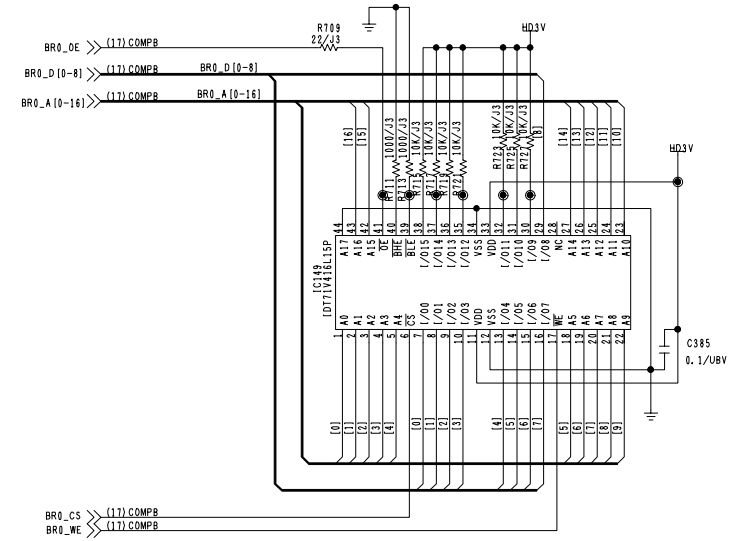
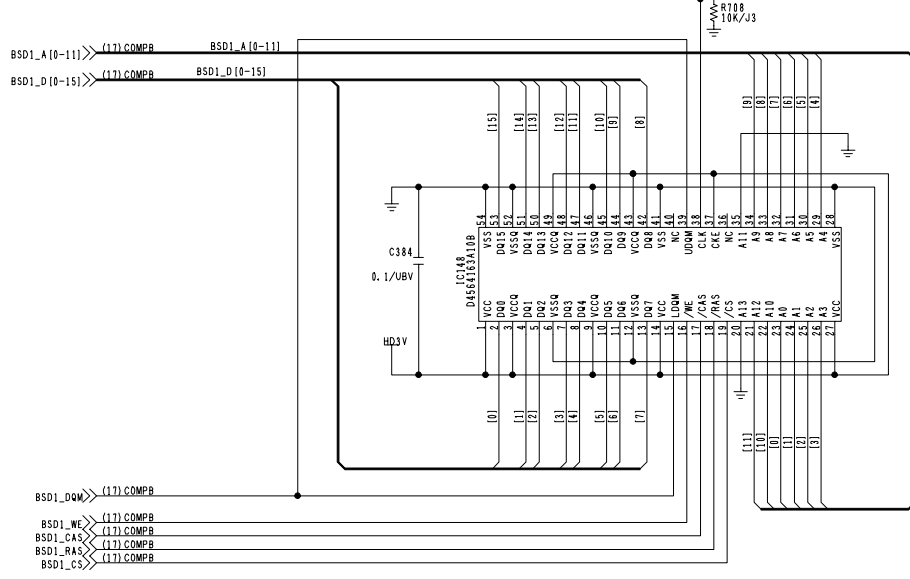
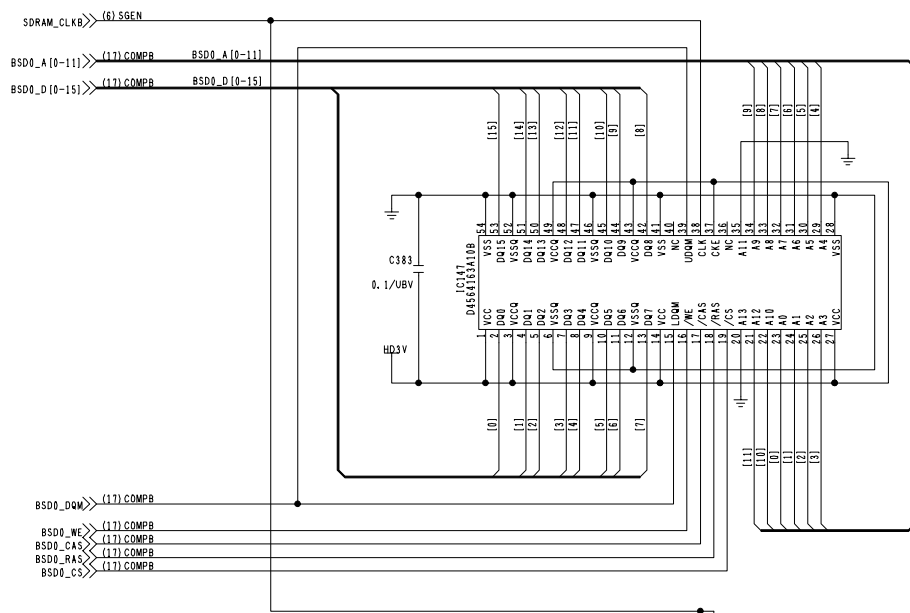


Ref No. Series.

COMPONENT NAME	L2: PB PROC (HD_CONCEAL_A)	16/34
CIRCUIT BOARD NO.		DRAWING NO.
VEP83503C: AJ-HD3700HP		KR30174 (16/34)
VEP83503A: AJ-HD3700HE		SCM060



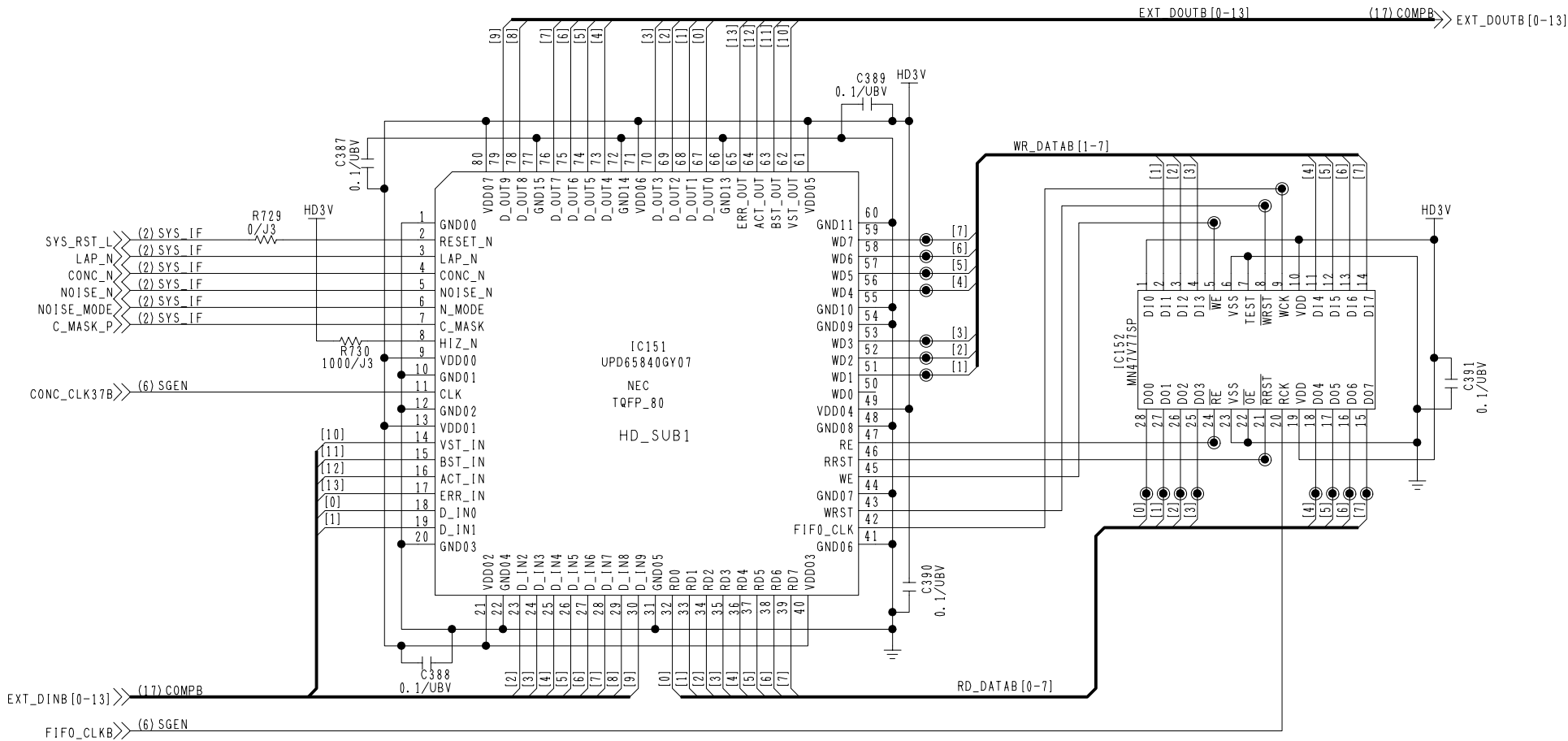
COMPONENT NAME		L2: PB PROC (COMP B)	17/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (17/34)	
VEP83503A: AJ-HD3700HE		SCM061	



COMPONENT NAME	L2: PB PRO (MEMORY B)	18/34
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83503C: AJ-HD3700HP	KR30174 (18/34)	
VEP83503A: AJ-HD3700HE	SCM062	

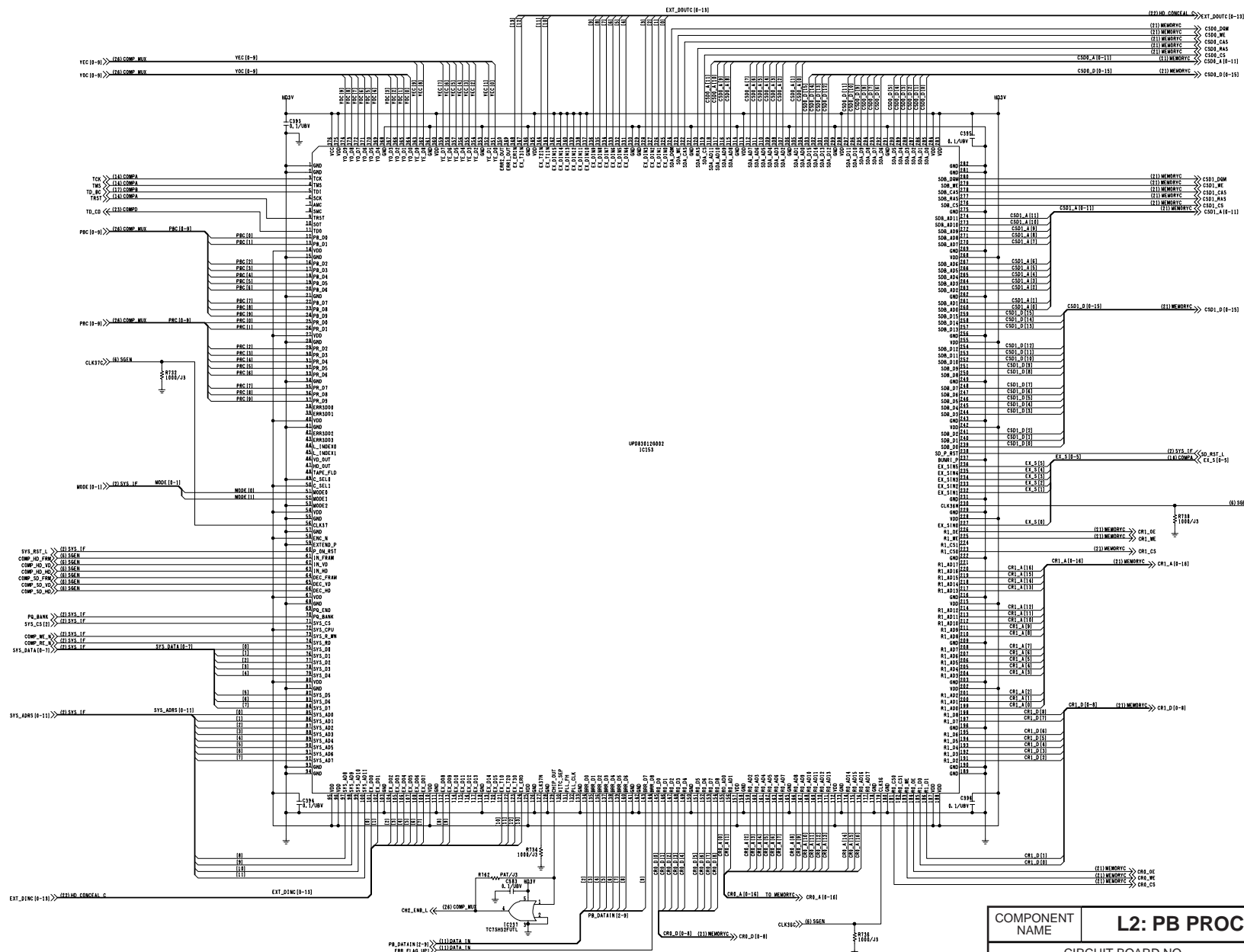
A
B
C
D
E
F
G
H
I
J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

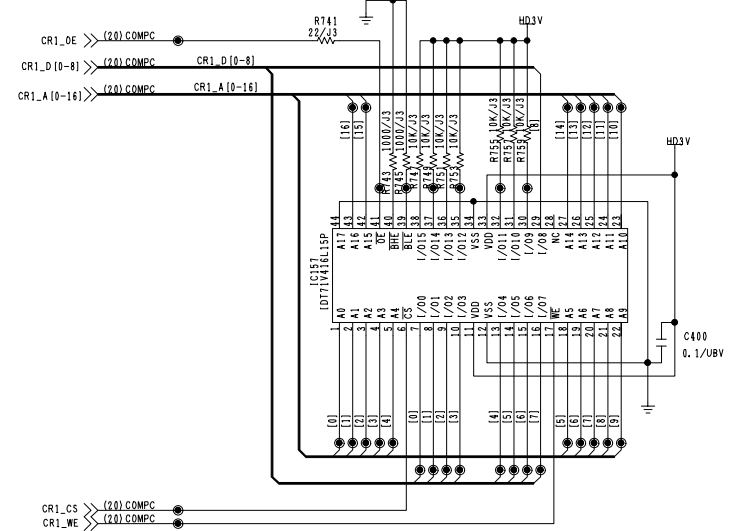
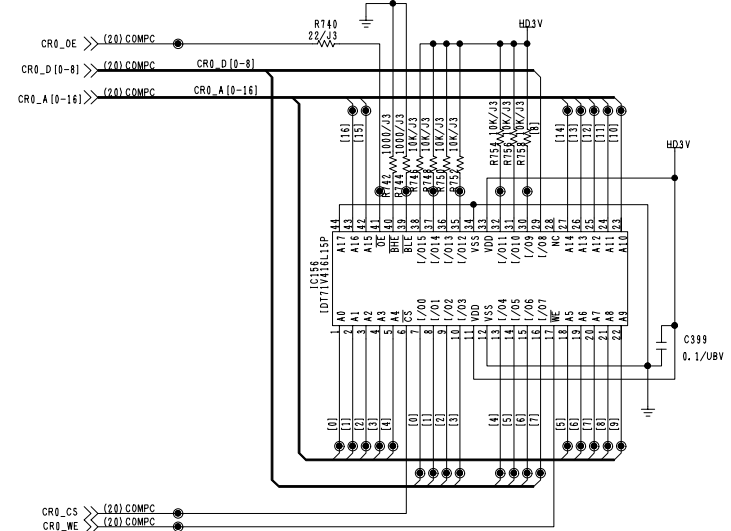
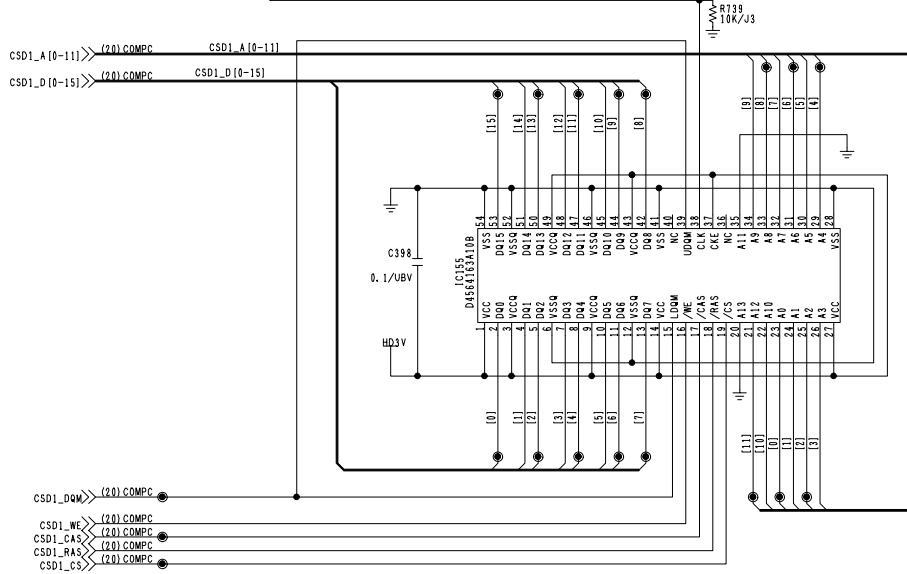
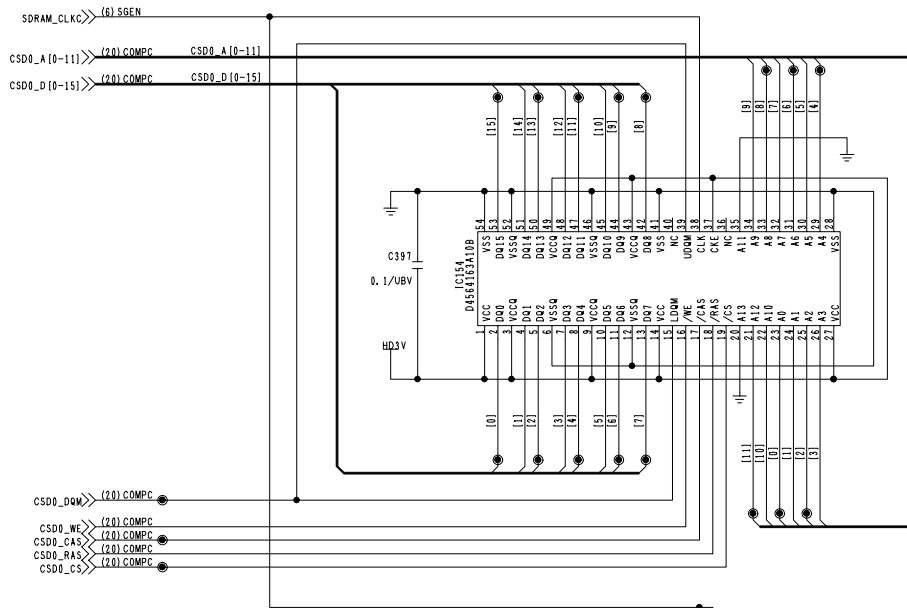


Ref No. Series.

COMPONENT NAME	L2: PB PROC (HD_CONCEAL_B)	19/34
CIRCUIT BOARD NO.		DRAWING NO.
VEP83503C: AJ-HD3700HP		KR30174 (19/34)
VEP83503A: AJ-HD3700HE		SCM063



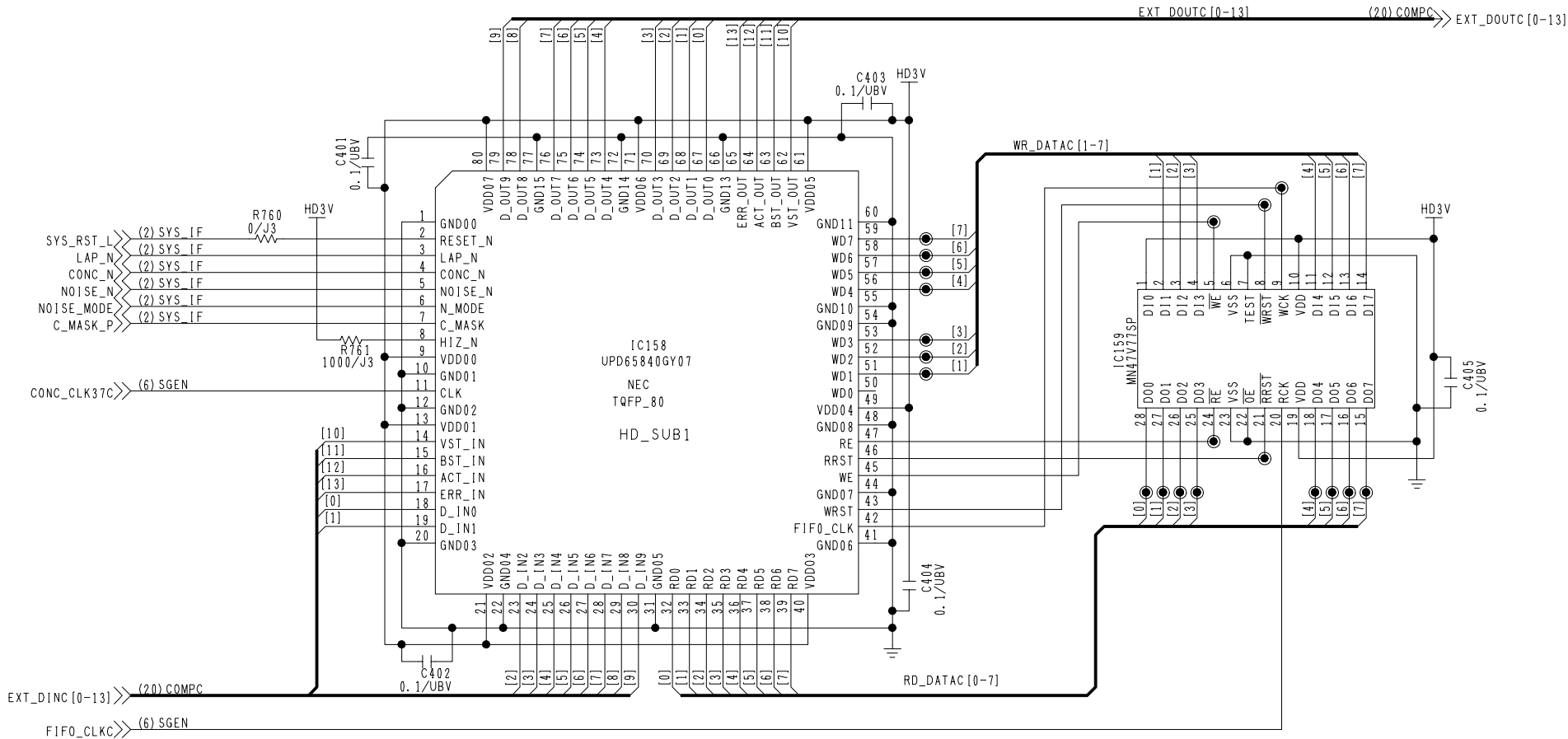
COMPONENT NAME	L2: PB PROC (COMP C)		20/34
	CIRCUIT BOARD NO.		DRAWING NO.
	VEP83503C: AJ-HD3700HP		KR30174 (20/34)
	VEP83503A: AJ-HD3700HE		SCM064



COMPONENT NAME	L2: PB PROC (MEMORY C)	21/34
CIRCUIT BOARD NO.		DRAWING NO.
VEP83503C: AJ-HD3700HP		KR30174 (21/34)
VEP83503A: AJ-HD3700HE		SCM065

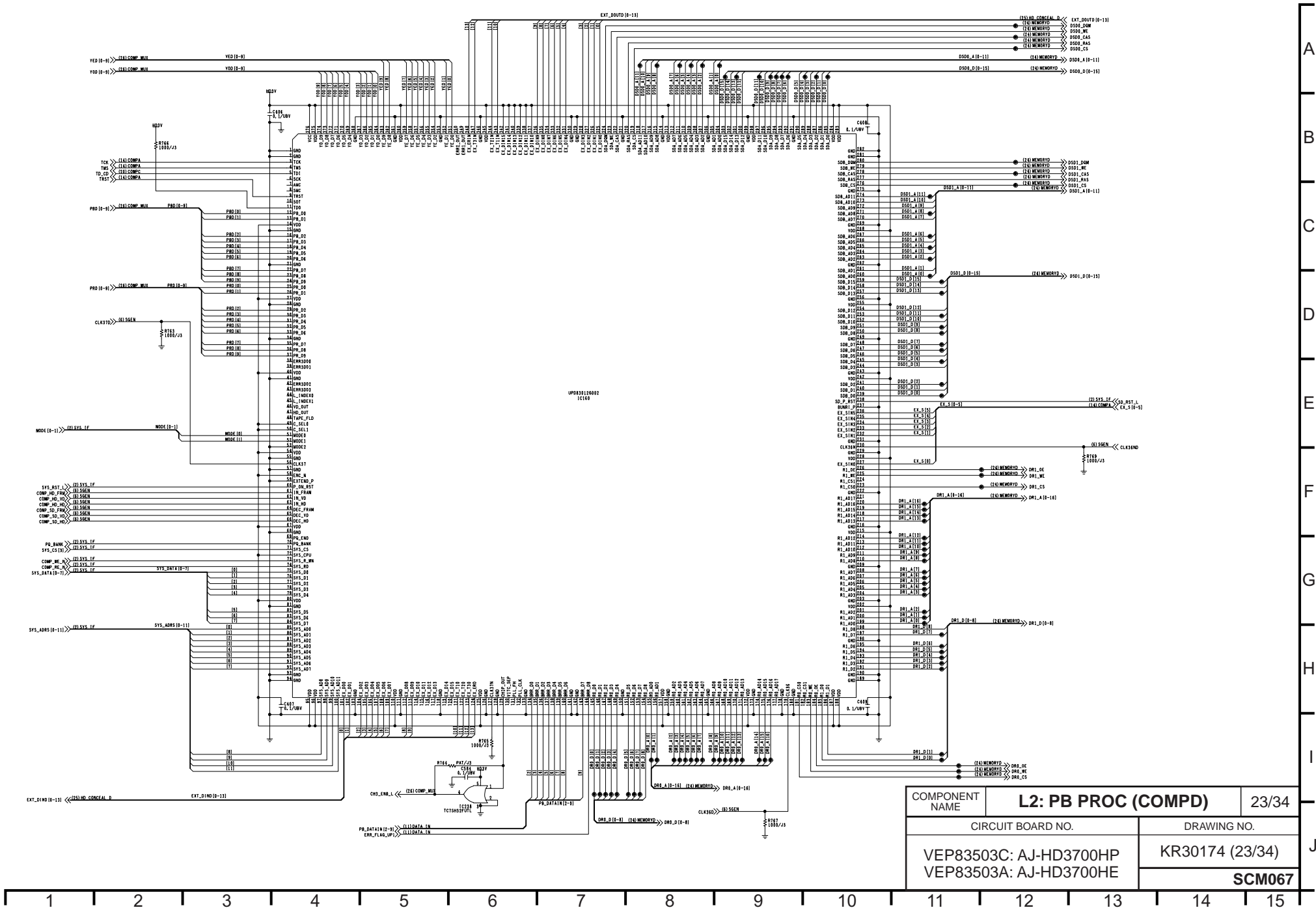
A
B
C
D
E
F
G
H
I
J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

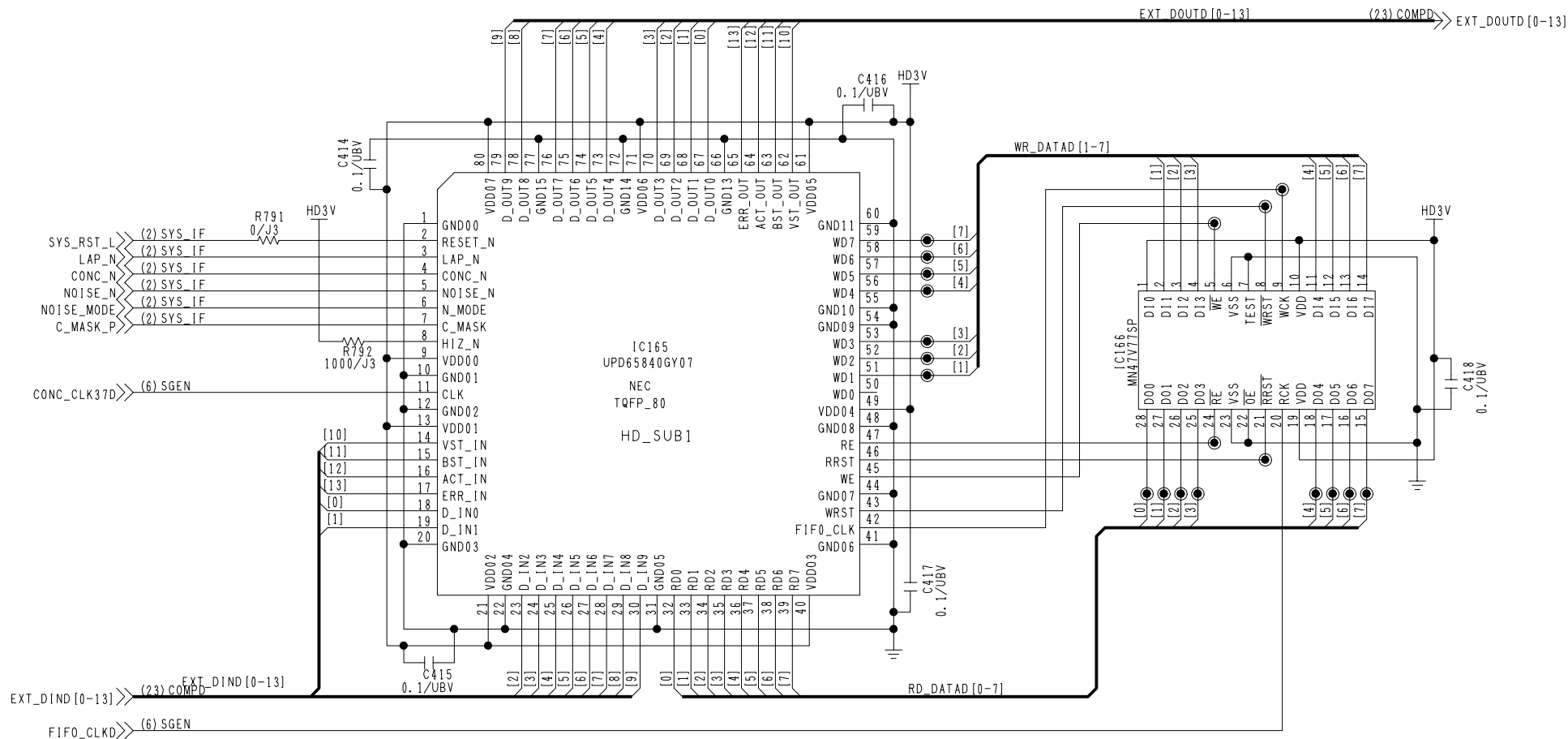


Ref No. Series.

COMPONENT NAME	L2: PB PROC (HD_CONCEAL_C)	22/34
CIRCUIT BOARD NO.		DRAWING NO.
VEP83503C: AJ-HD3700HP		KR30174 (22/34)
VEP83503A: AJ-HD3700HE		SCM066

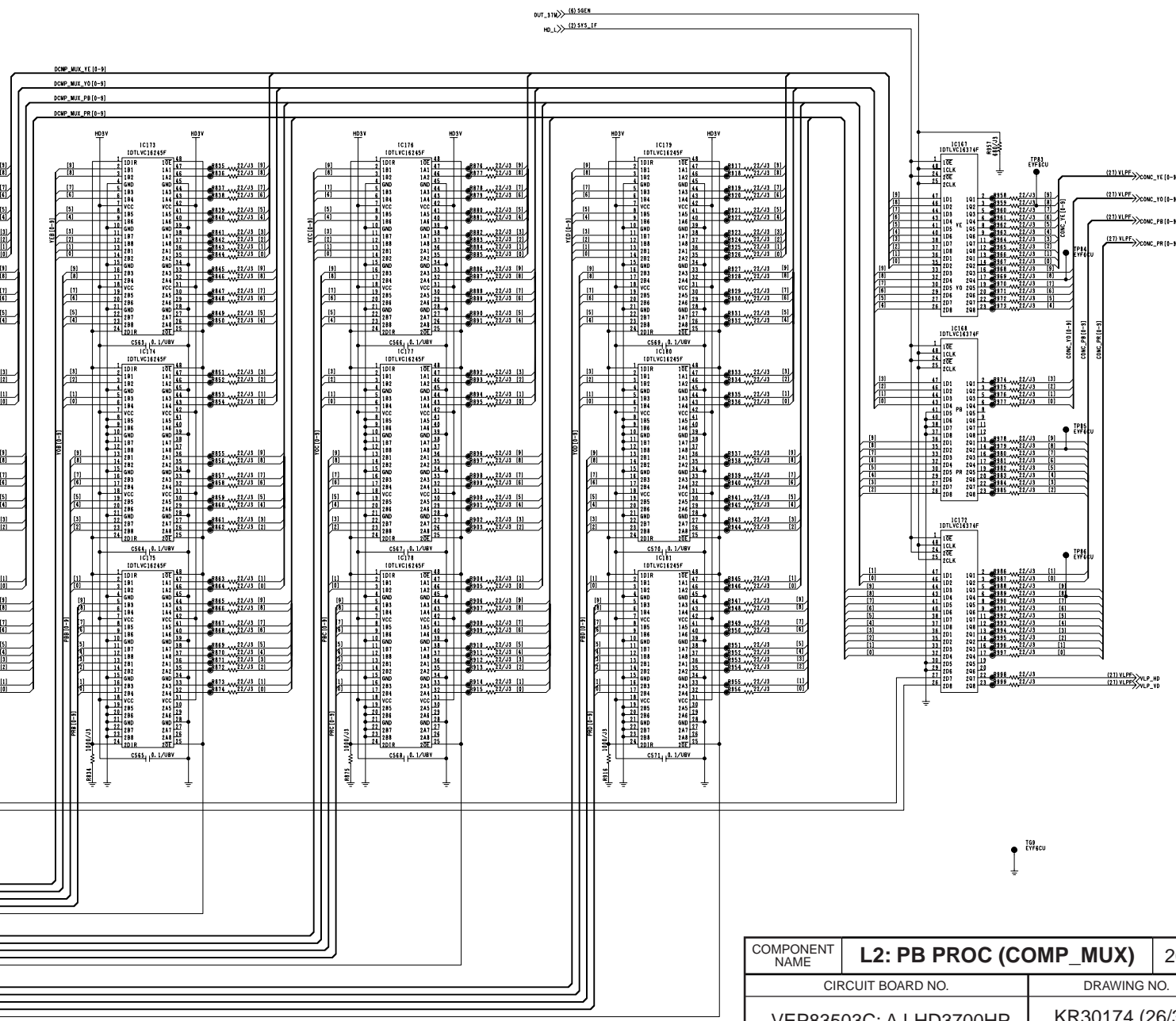


COMPONENT NAME	L2: PB PROC (COMPD)		23/34
	CIRCUIT BOARD NO.		DRAWING NO.
	VEP83503C: AJ-HD3700HP		KR30174 (23/34)
	VEP83503A: AJ-HD3700HE		SCM067

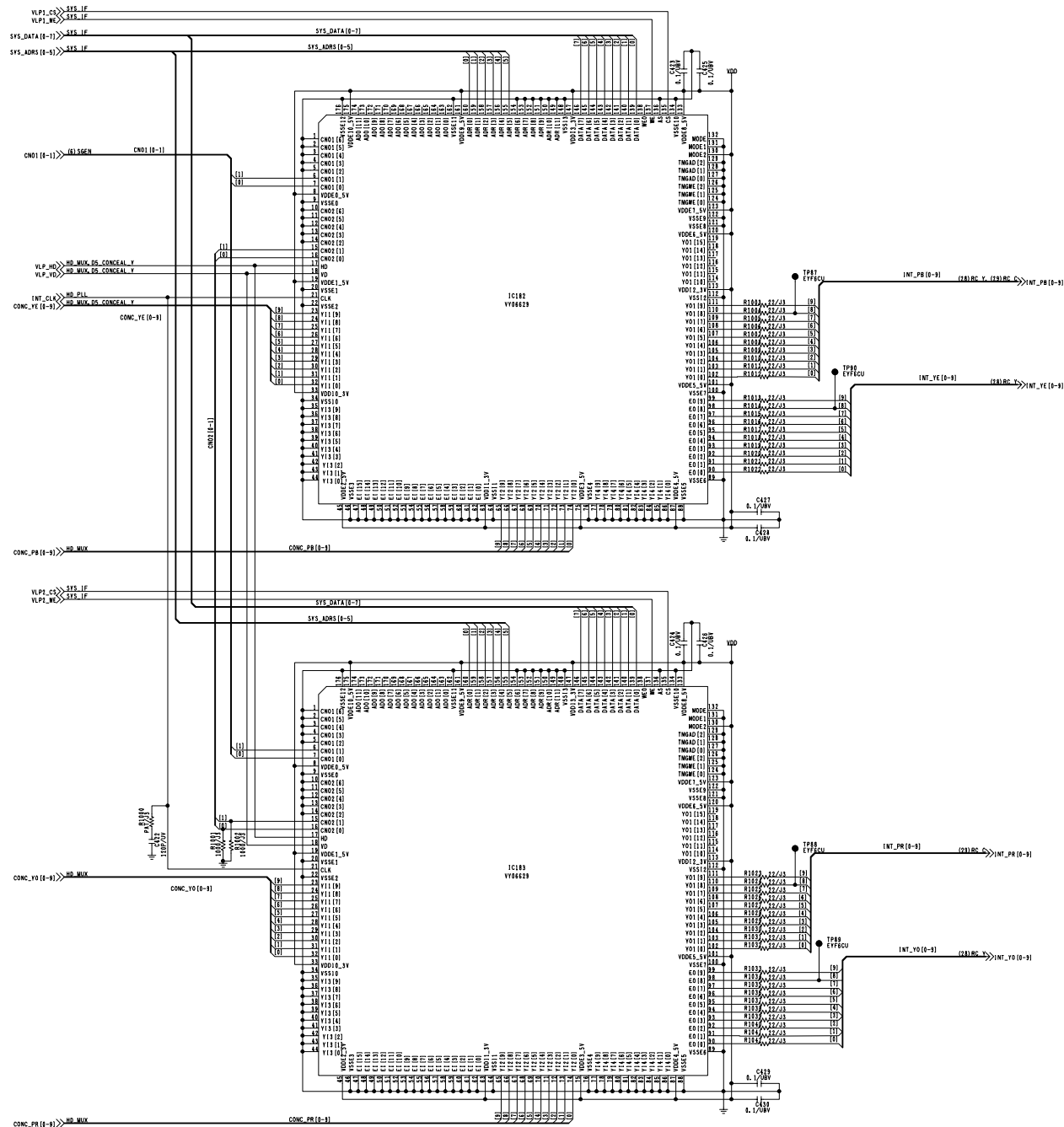


Ref No. Series.

COMPONENT NAME	L2: PB PROC (HD_CONCEAL_D)	25/34
CIRCUIT BOARD NO.	VEP83503C: AJ-HD3700HP	DRAWING NO.
	VEP83503A: AJ-HD3700HE	KR30174 (25/34)
		SCM069

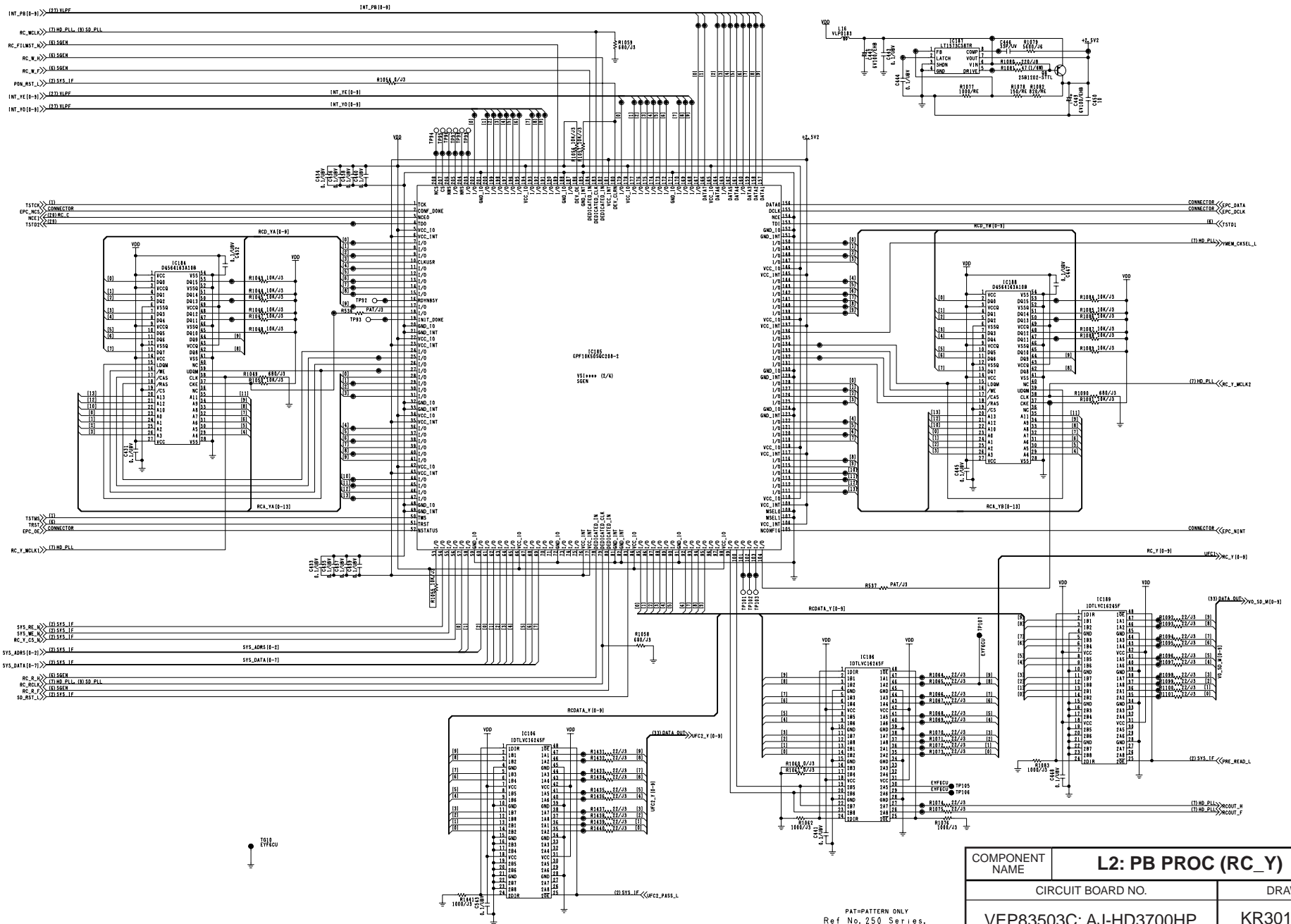


COMPONENT NAME	L2: PB PROC (COMP_MUX)		26/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (26/34)	
VEP83503A: AJ-HD3700HE		SCM070	



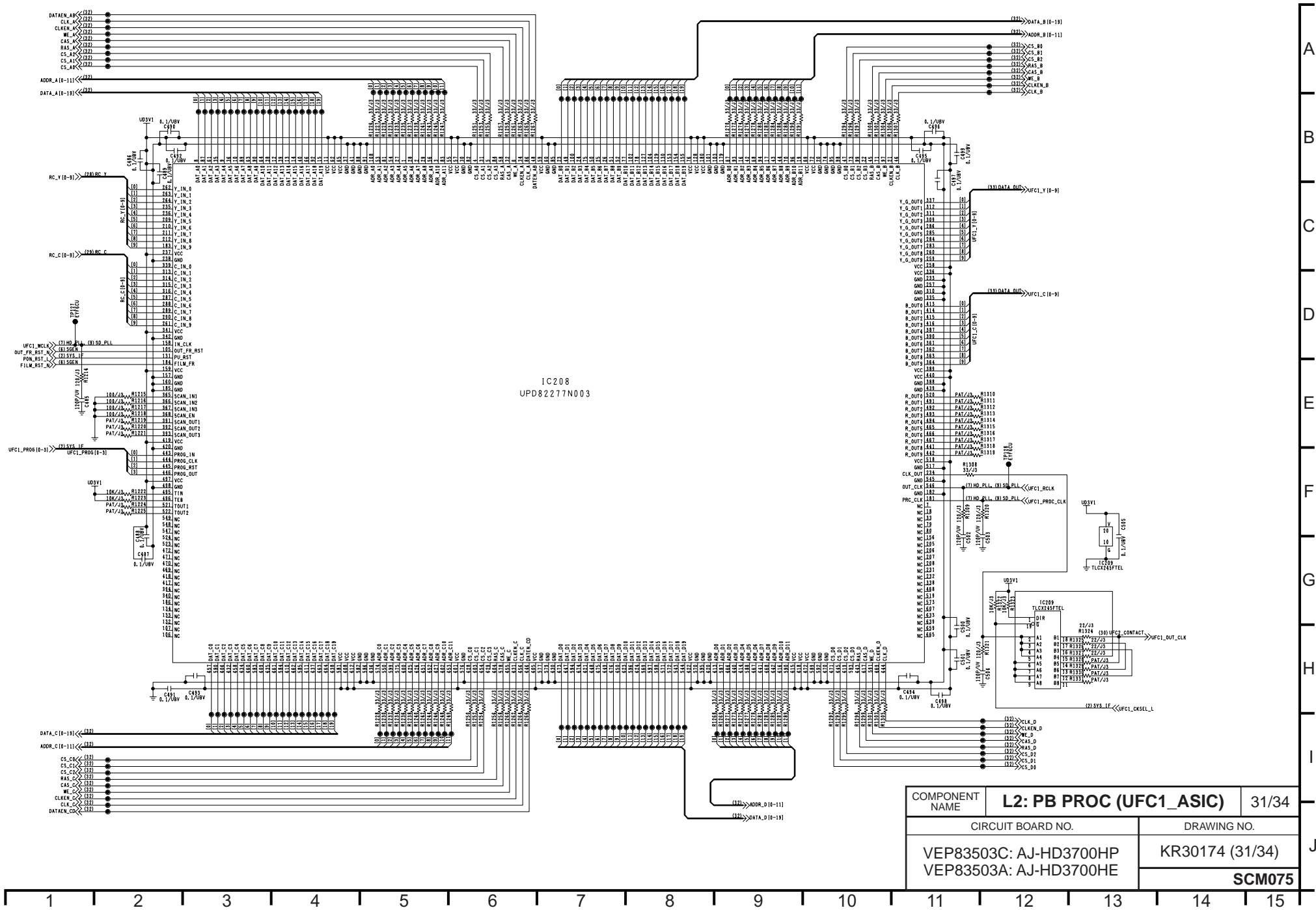
PAT=PATTERN ONLY
Ref No. 695 Series.

COMPONENT NAME	L2: PB PROC (VLPF)		27/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (27/34)	
VEP83503A: AJ-HD3700HE		SCM071	

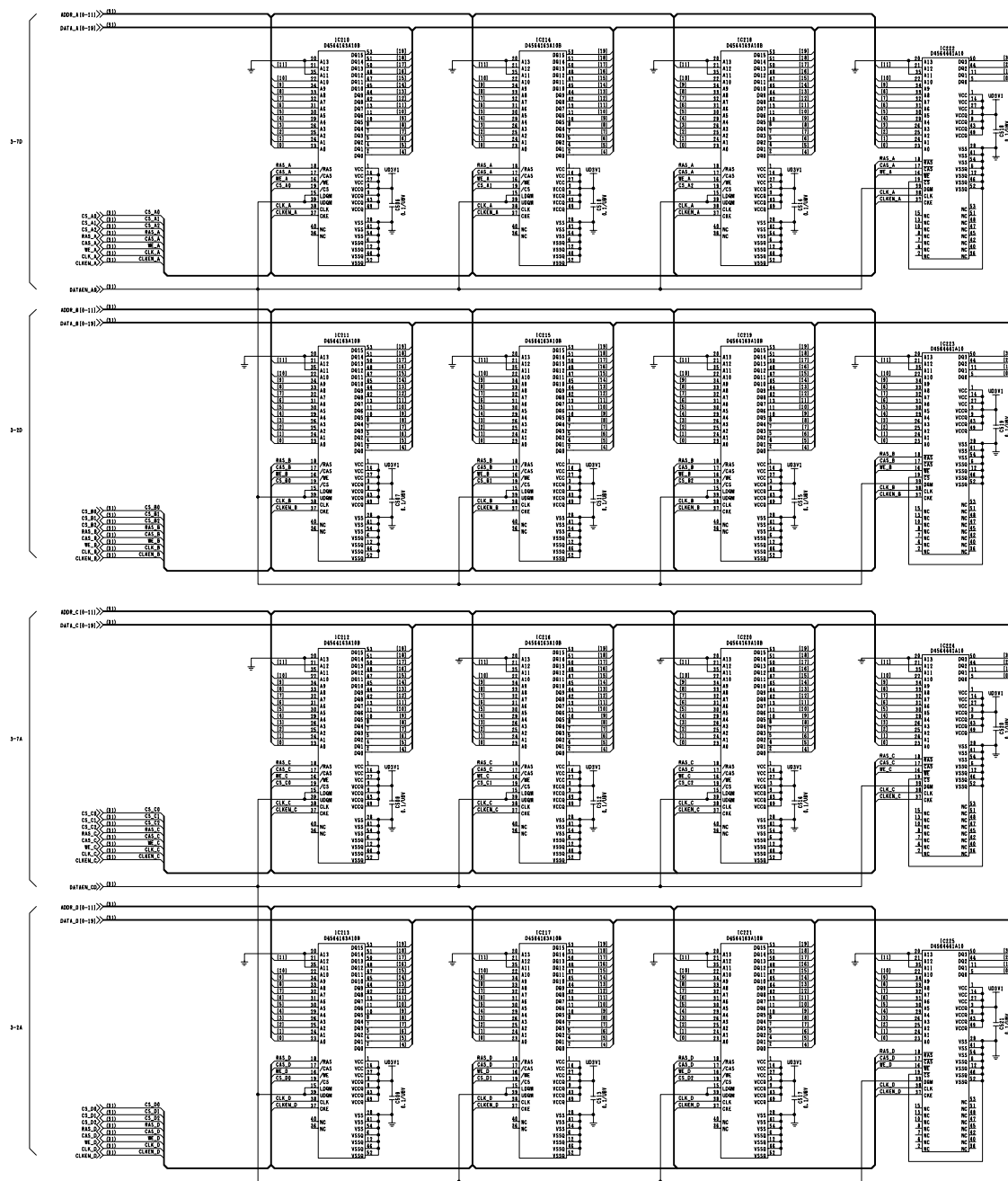


COMPONENT NAME		L2: PB PROC (RC_Y)	28/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (28/34)	
VEP83503A: AJ-HD3700HE		SCM072	

PATH/PATTERN ONLY
Ref No. 250 Series.



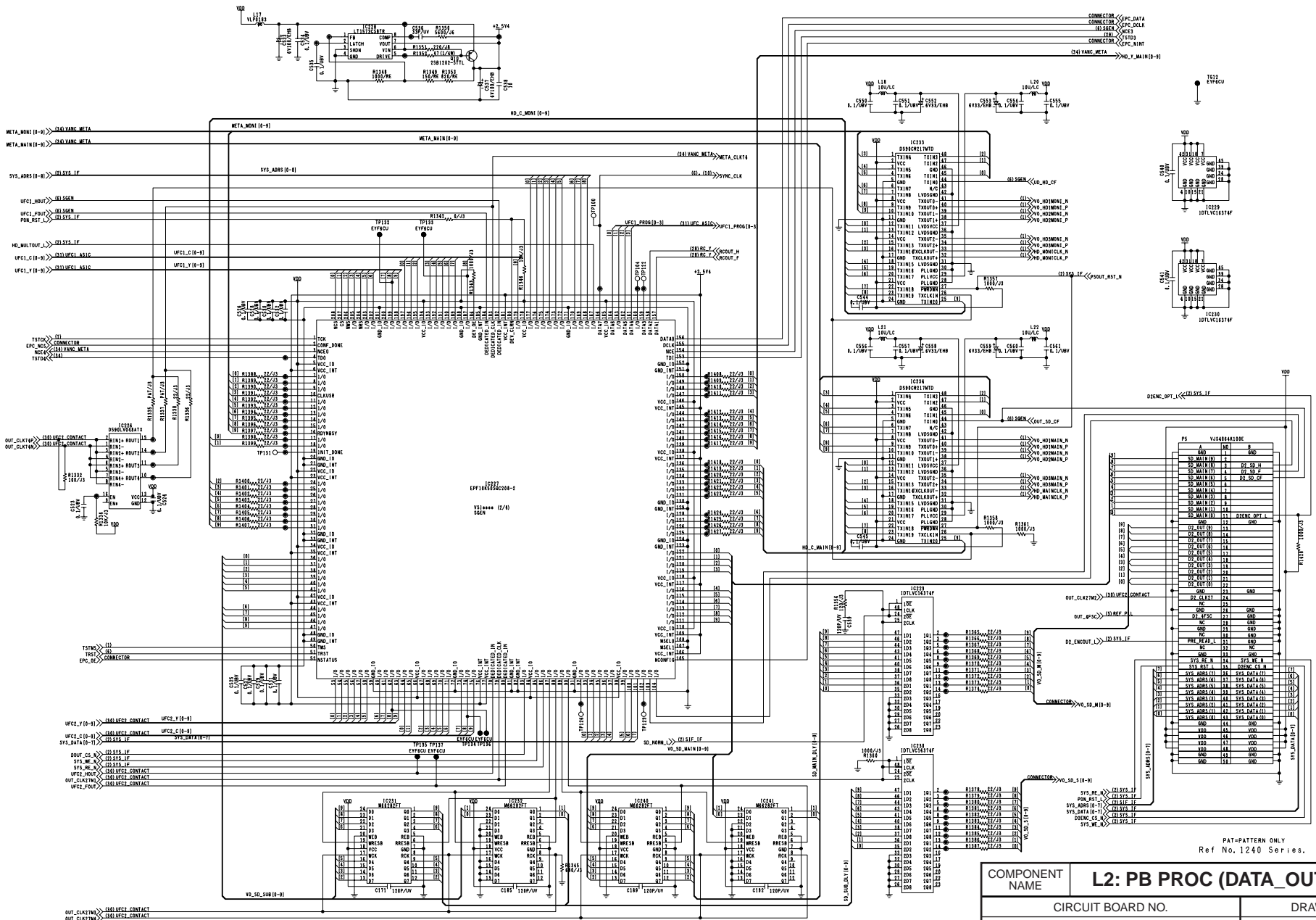
COMPONENT NAME	L2: PB PROC (UFC1_ASIC)		31/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (31/34)	
VEP83503A: AJ-HD3700HE		SCM075	



COMPONENT NAME	L2: PB PROC (UFC1_SDRAM)	32/34
CIRCUIT BOARD NO.		DRAWING NO.
VEP83503C: AJ-HD3700HP		KR30174 (32/34)
VEP83503A: AJ-HD3700HE		SCM076

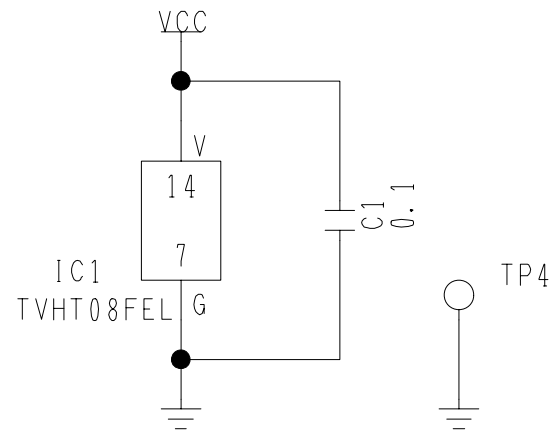
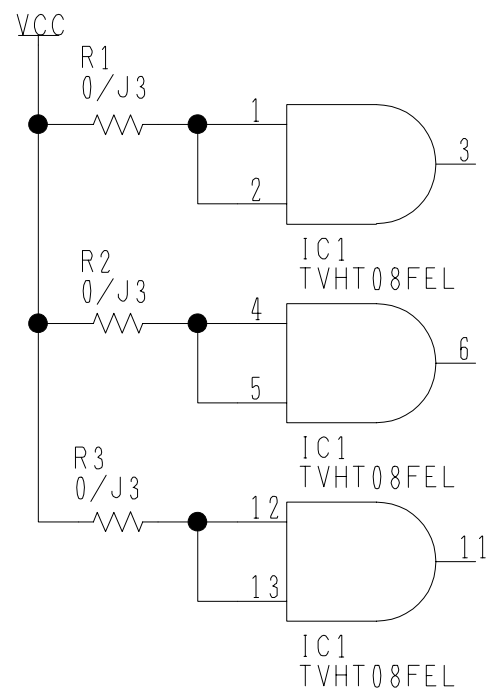
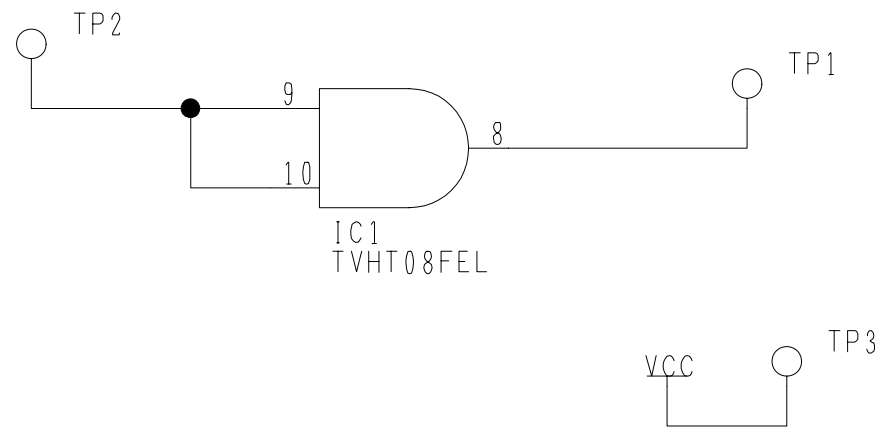
A
B
C
D
E
F
G
H
I
J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

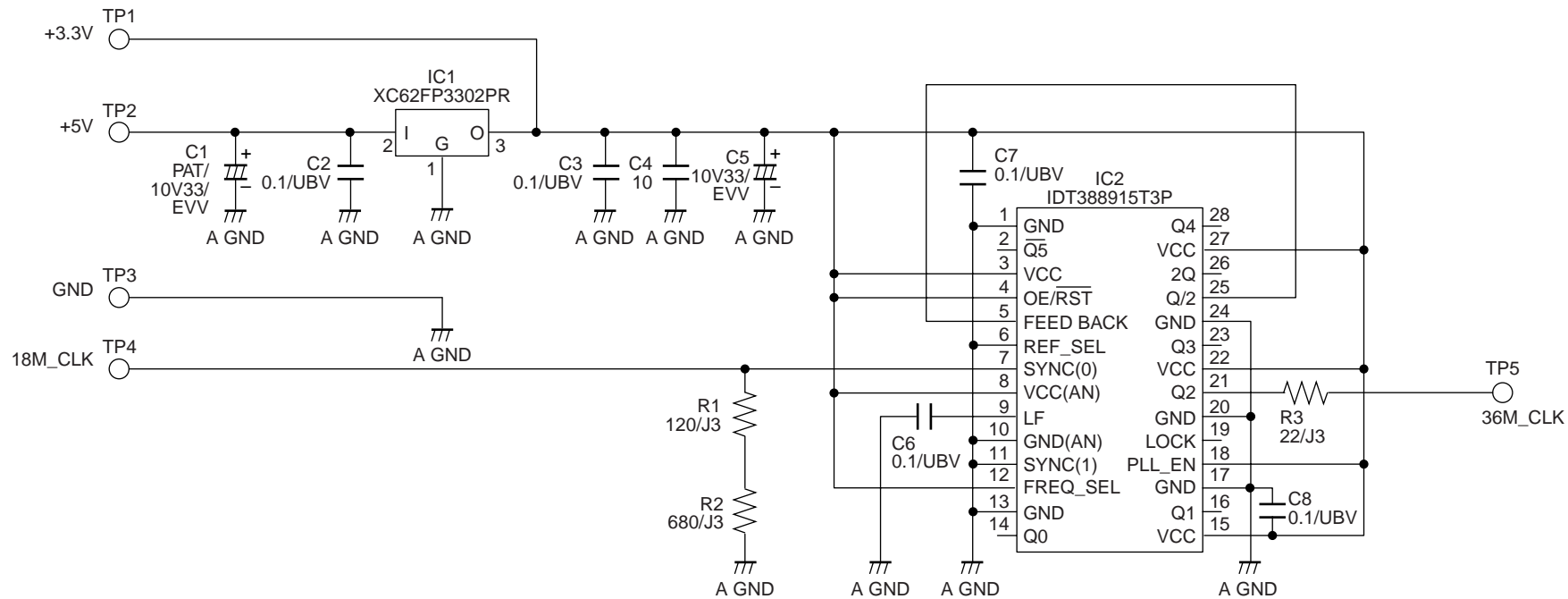


PAT-PATTERN ONLY
Ref No. 1240 Series.

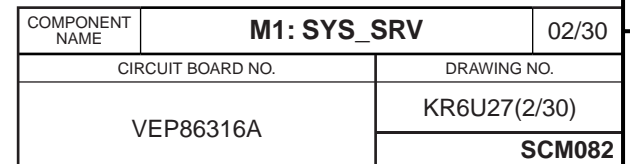
COMPONENT NAME		L2: PB PROC (DATA_OUT)	33/34
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83503C: AJ-HD3700HP		KR30174 (33/34)	
VEP83503A: AJ-HD3700HE		SCM077	

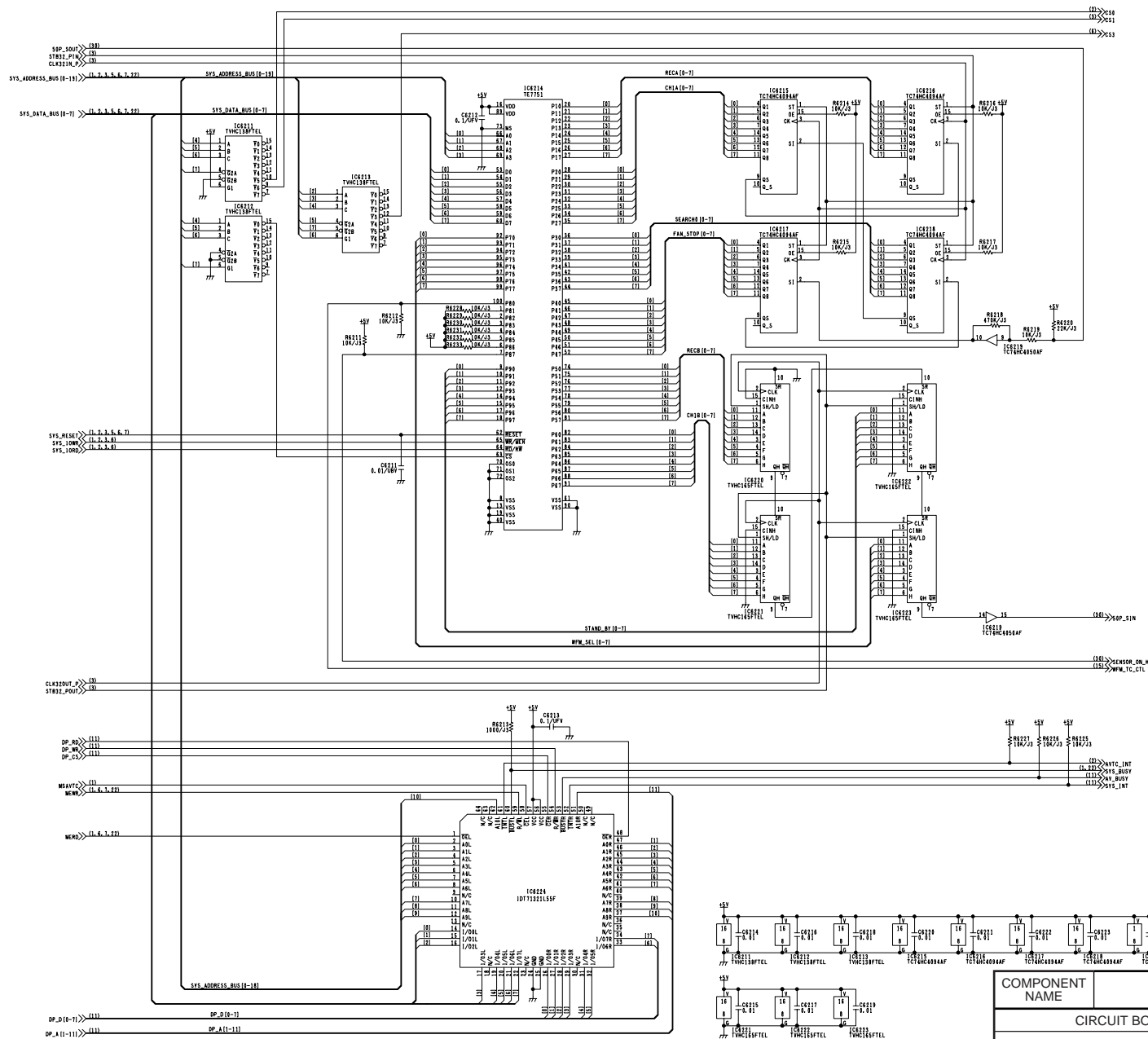


COMPONENT NAME	L2: L2 GATE		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83552A		KR30085 (1/1)	
		SCM079	

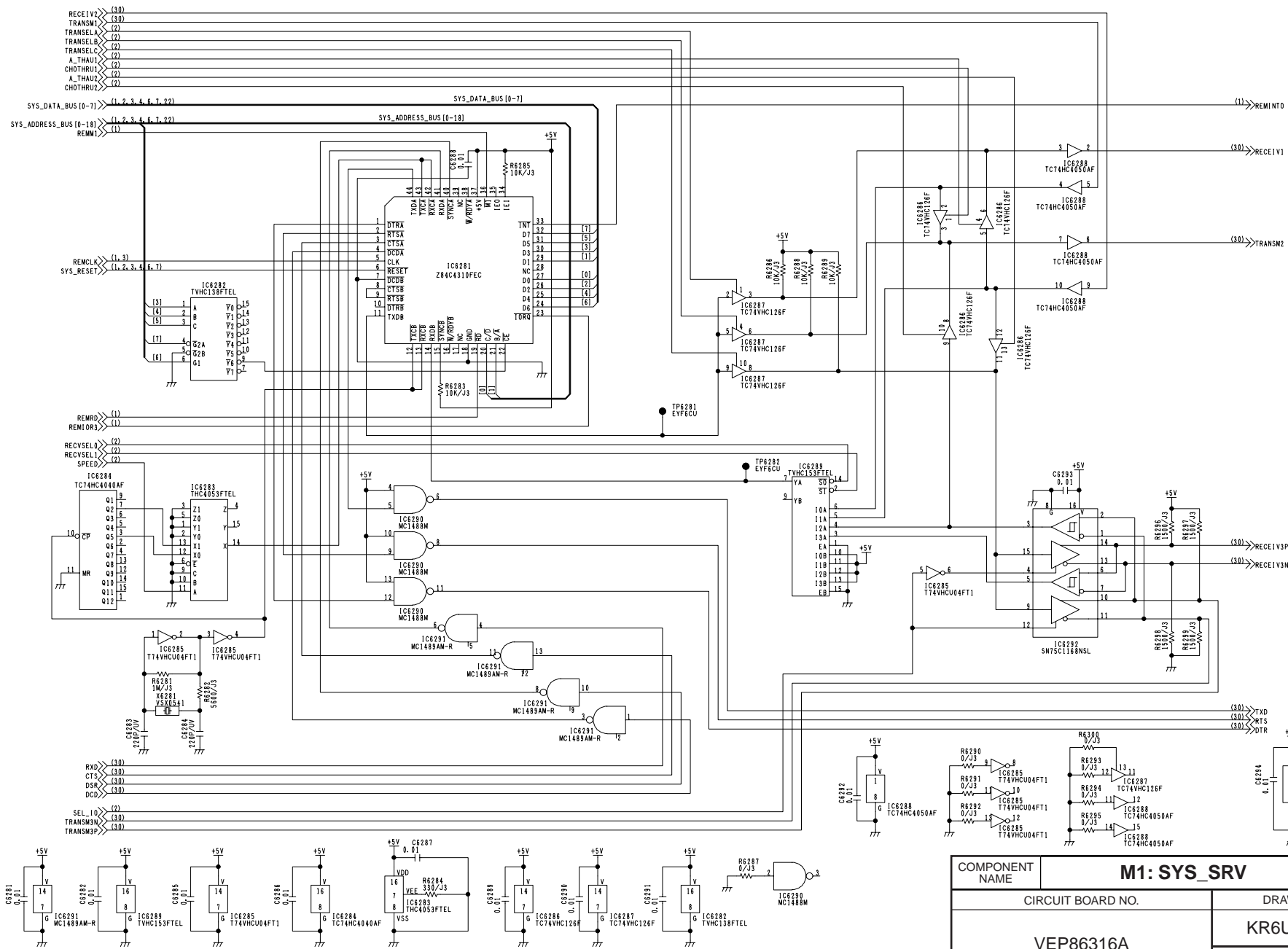


COMPONENT NAME	L2:CLK_DRV		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83575A		KR30204 (01/01)	
		SCM080	

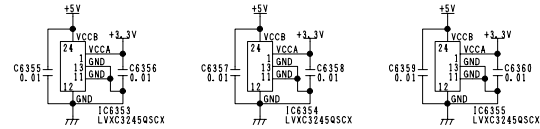
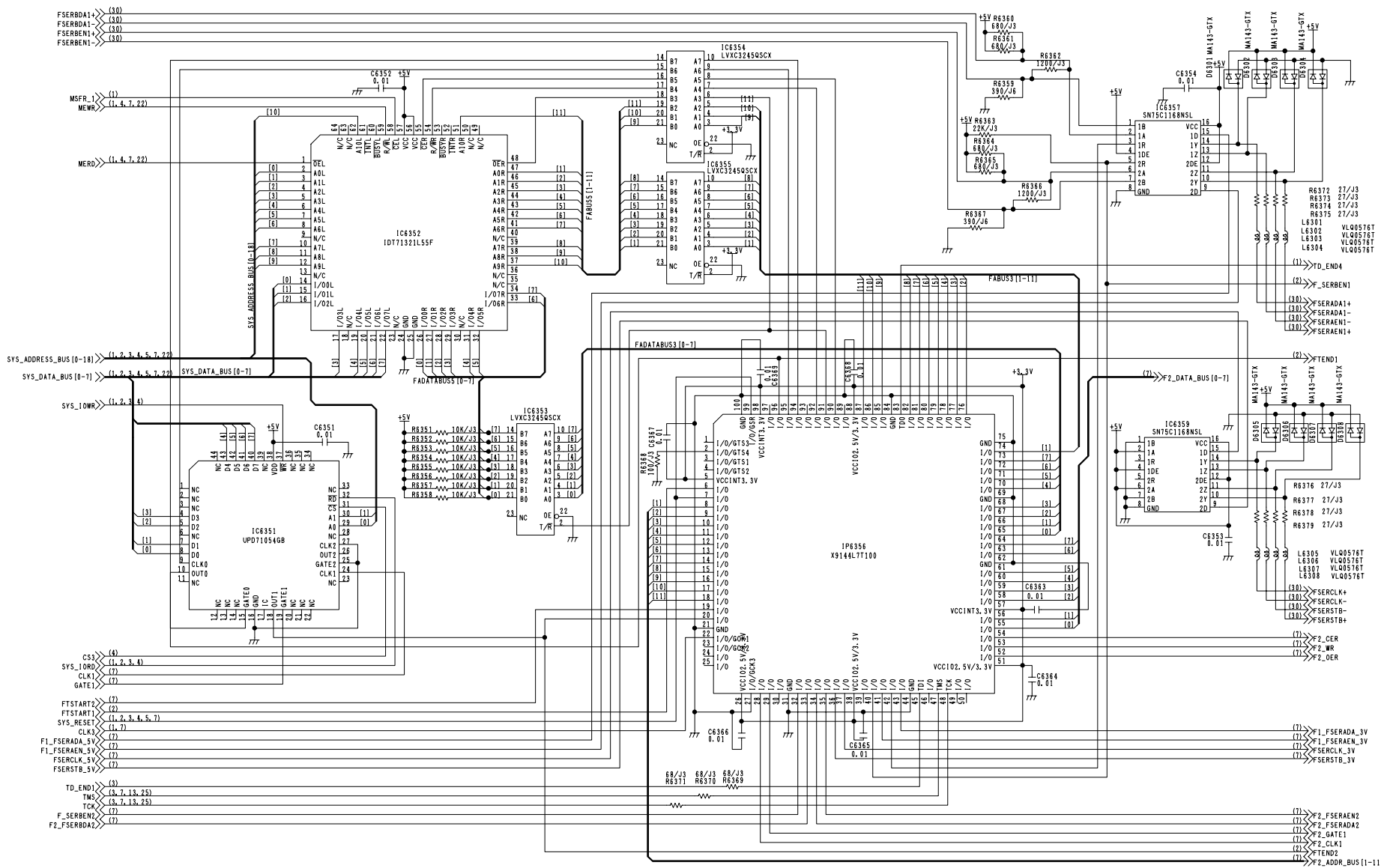




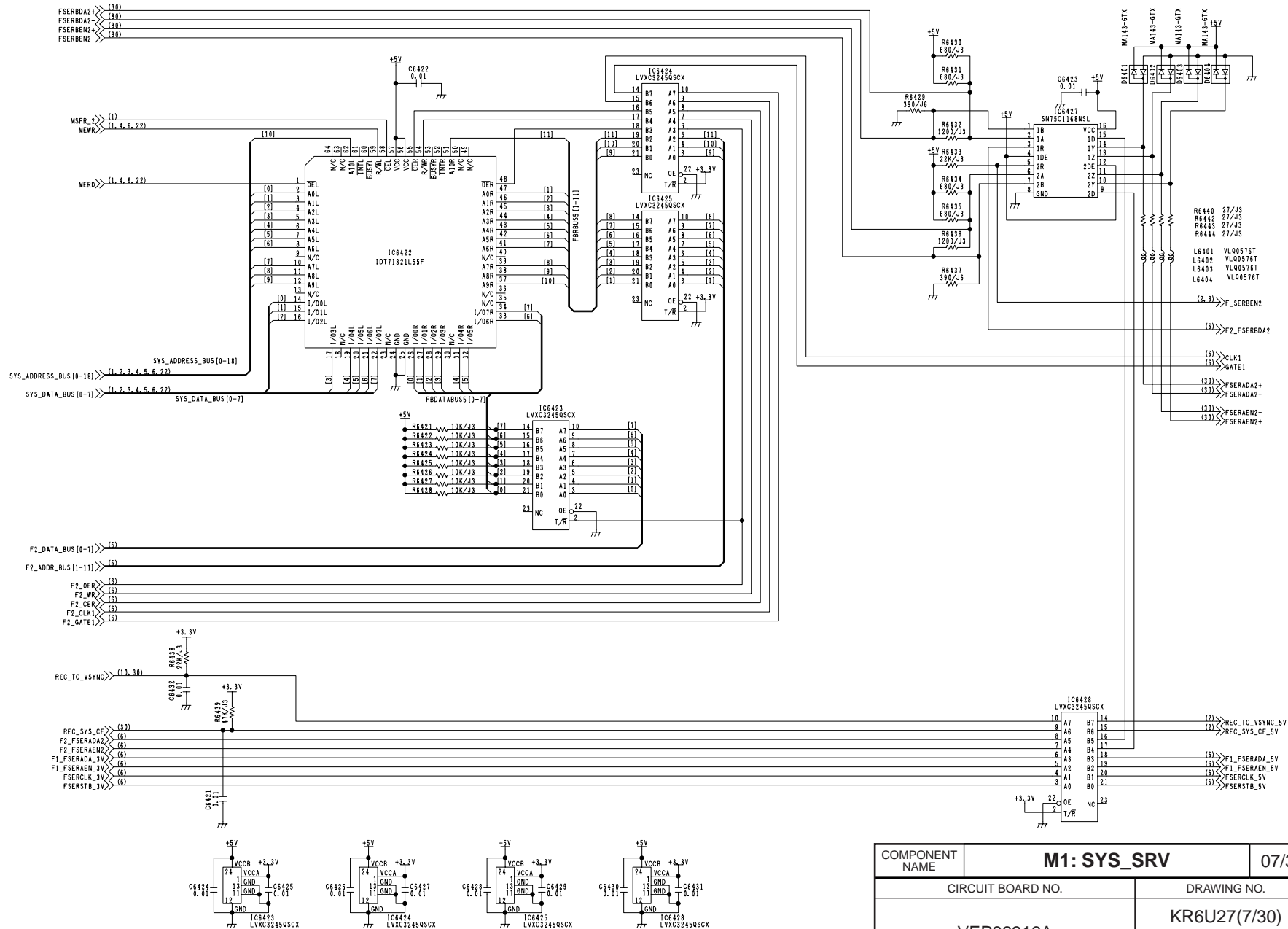
COMPONENT NAME	M1: SYS_SRV	04/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(4/30)
		SCM084



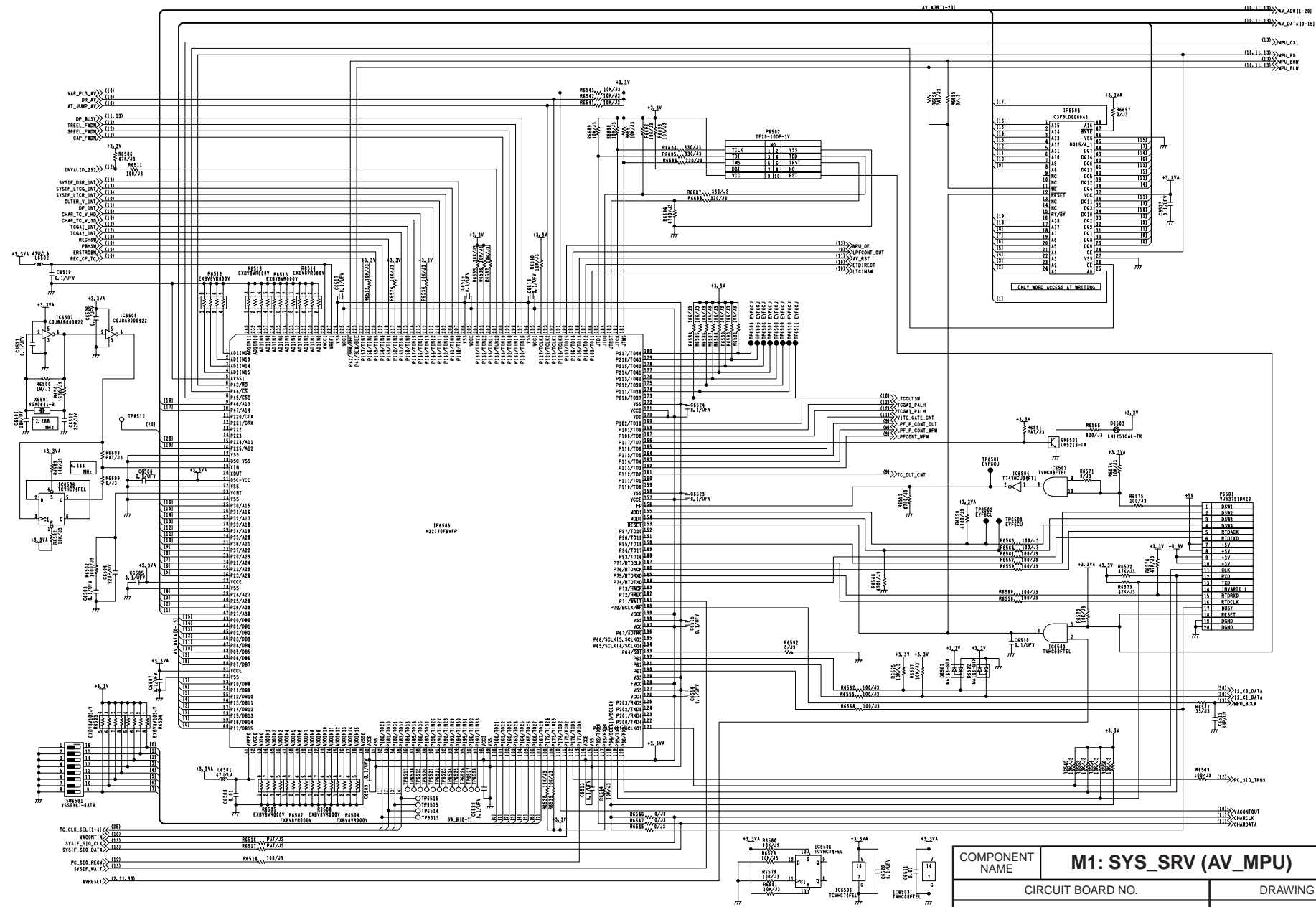
COMPONENT NAME	M1: SYS_SRV		05/30
CIRCUIT BOARD NO.		DRAWING NO.	
VEP86316A		KR6U27(5/30)	
		SCM085	



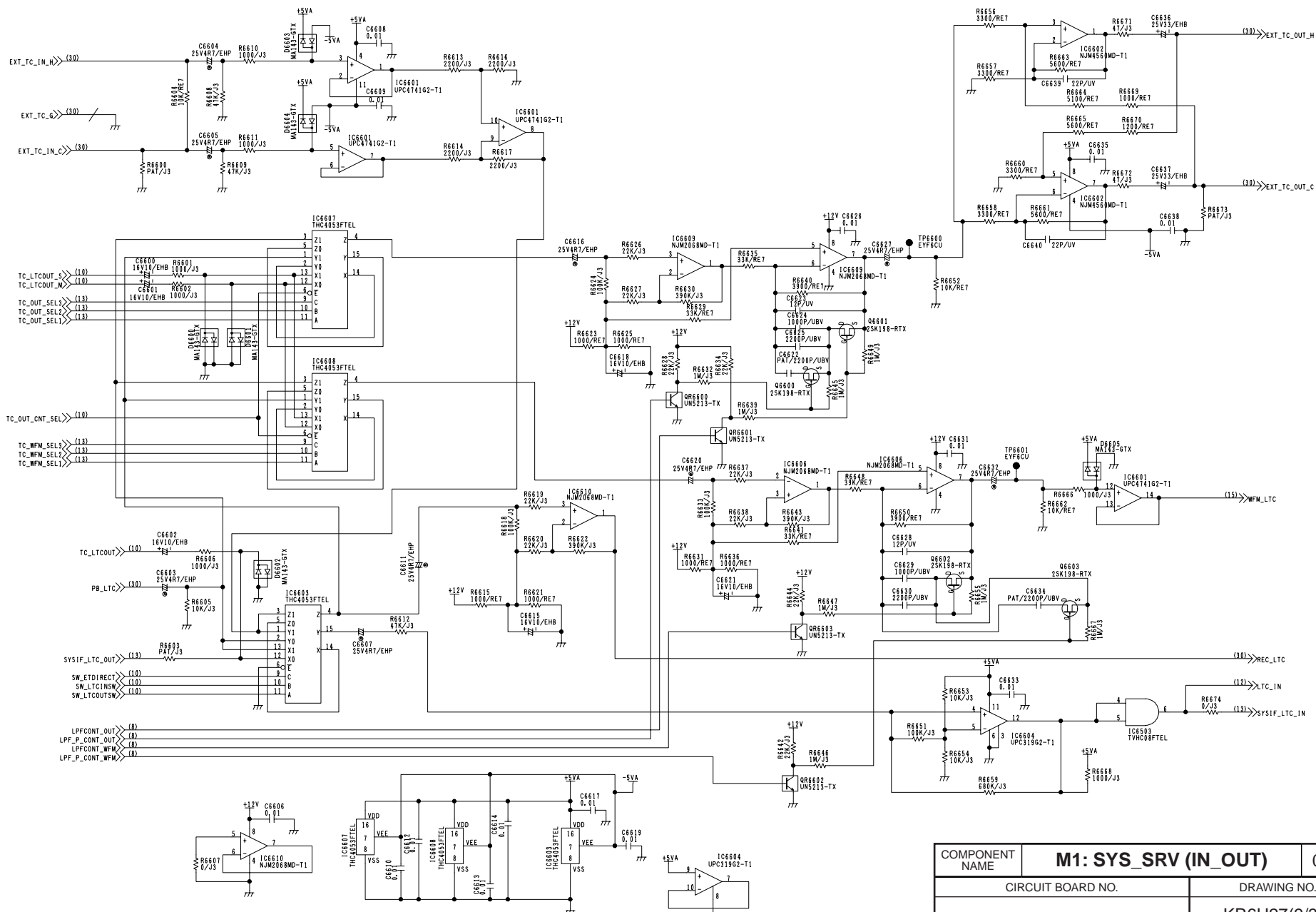
COMPONENT NAME	M1: SYS_SRV	06/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO. KR6U27(6/30)
		SCM086



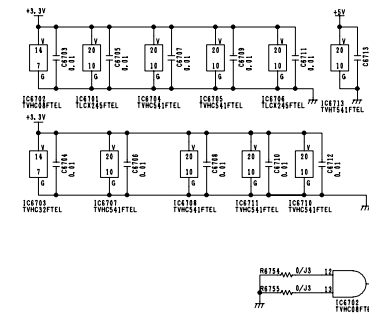
COMPONENT NAME	M1: SYS_SRV	07/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(7/30)
		SCM087



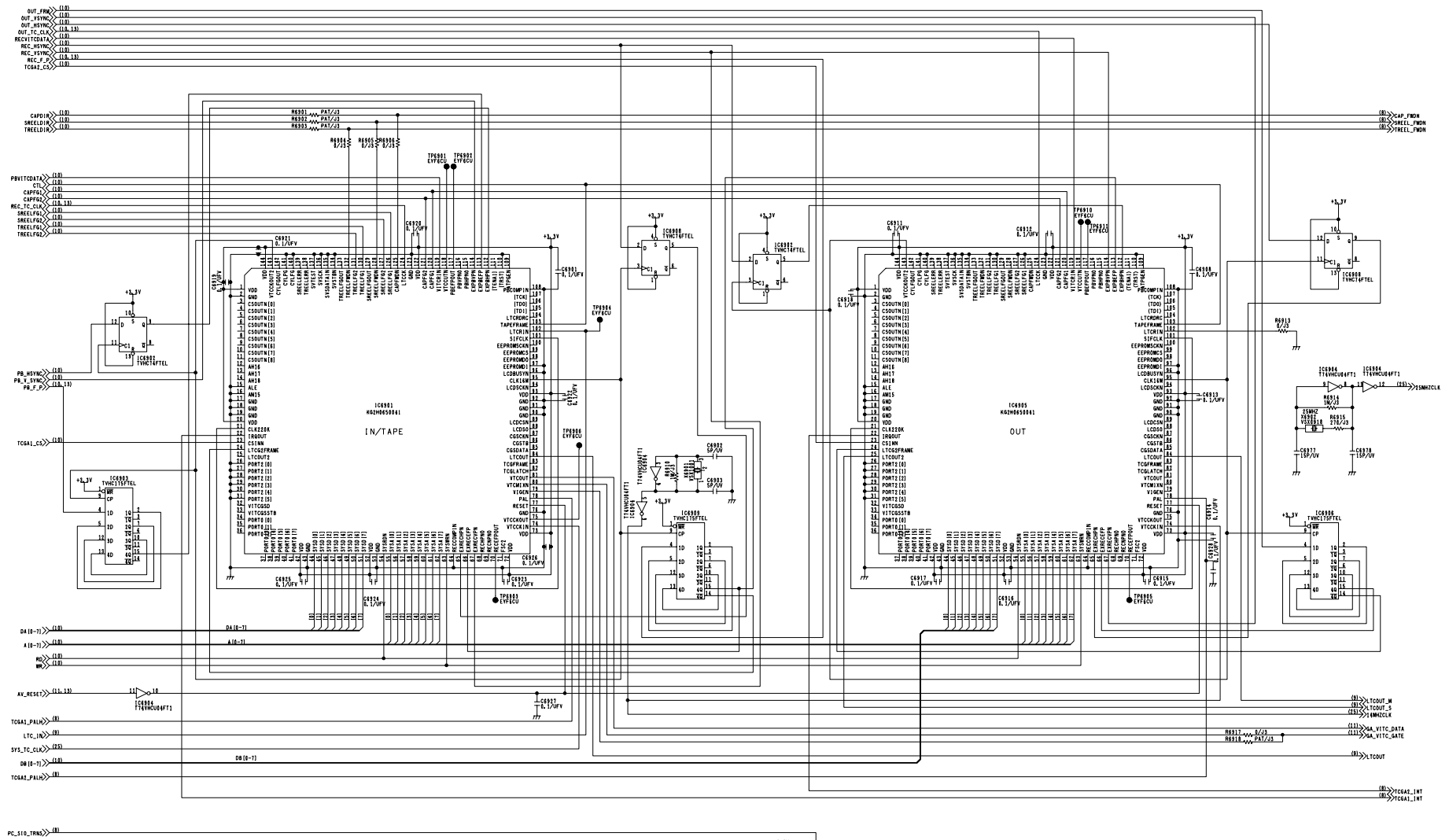
COMPONENT NAME	M1: SYS_SRV (AV_MPU)	08/30
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86316A	KR6U27(8/30)	
	SCM088	



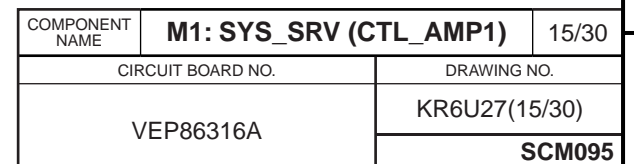
COMPONENT NAME	M1: SYS_SRV (IN_OUT)	09/30
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86316A	KR6U27(9/30)	
	SCM089	

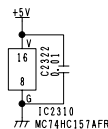
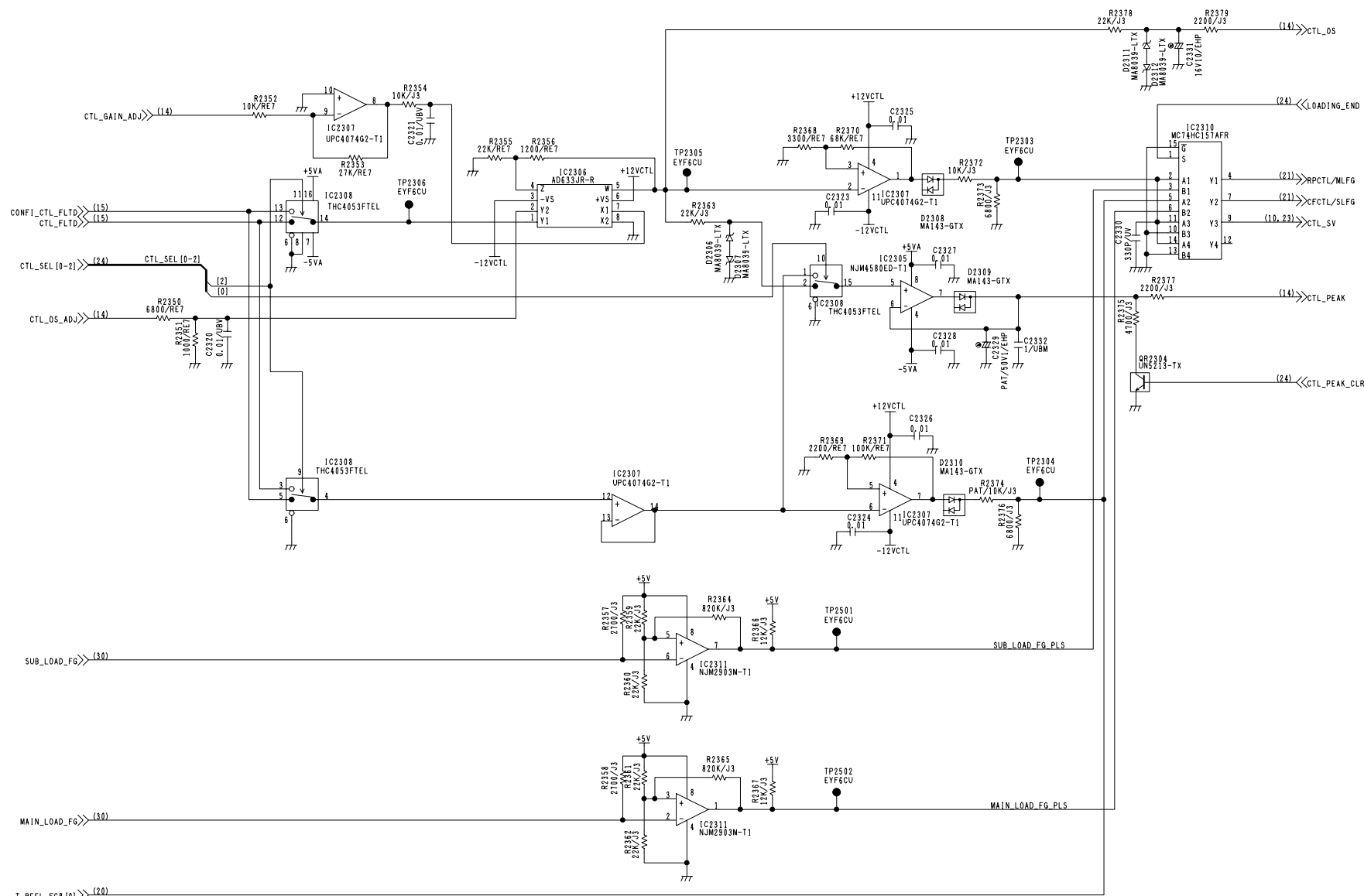


COMPONENT NAME	M1: SYS_SRV (BUFFER1)		10/30
CIRCUIT BOARD NO.		DRAWING NO.	
VEP86316A		KR6U27(10/30)	
		SCM090	

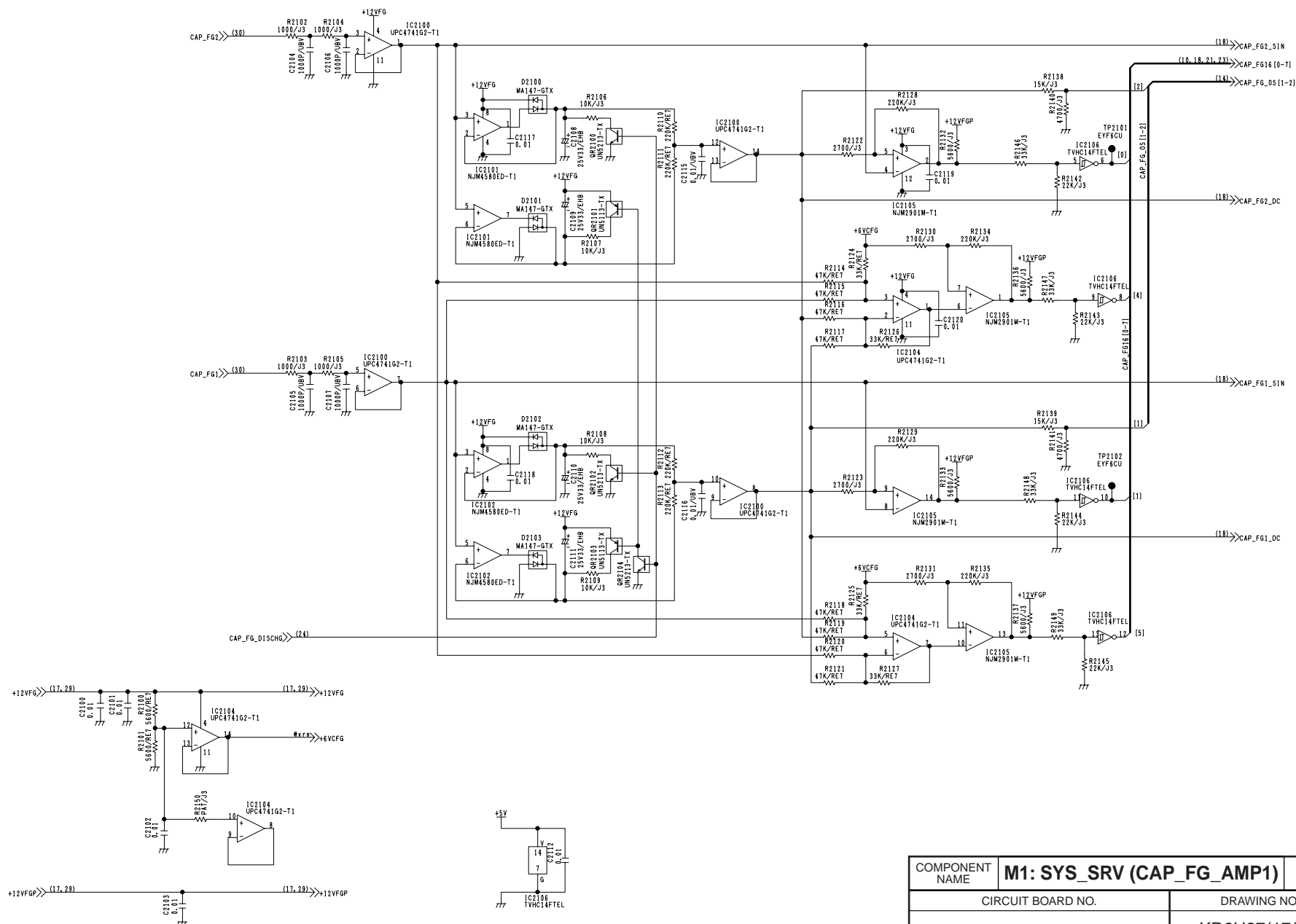


COMPONENT NAME	M1: SYS_SRV (TC.G.A)	12/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(12/30)
		SCM092

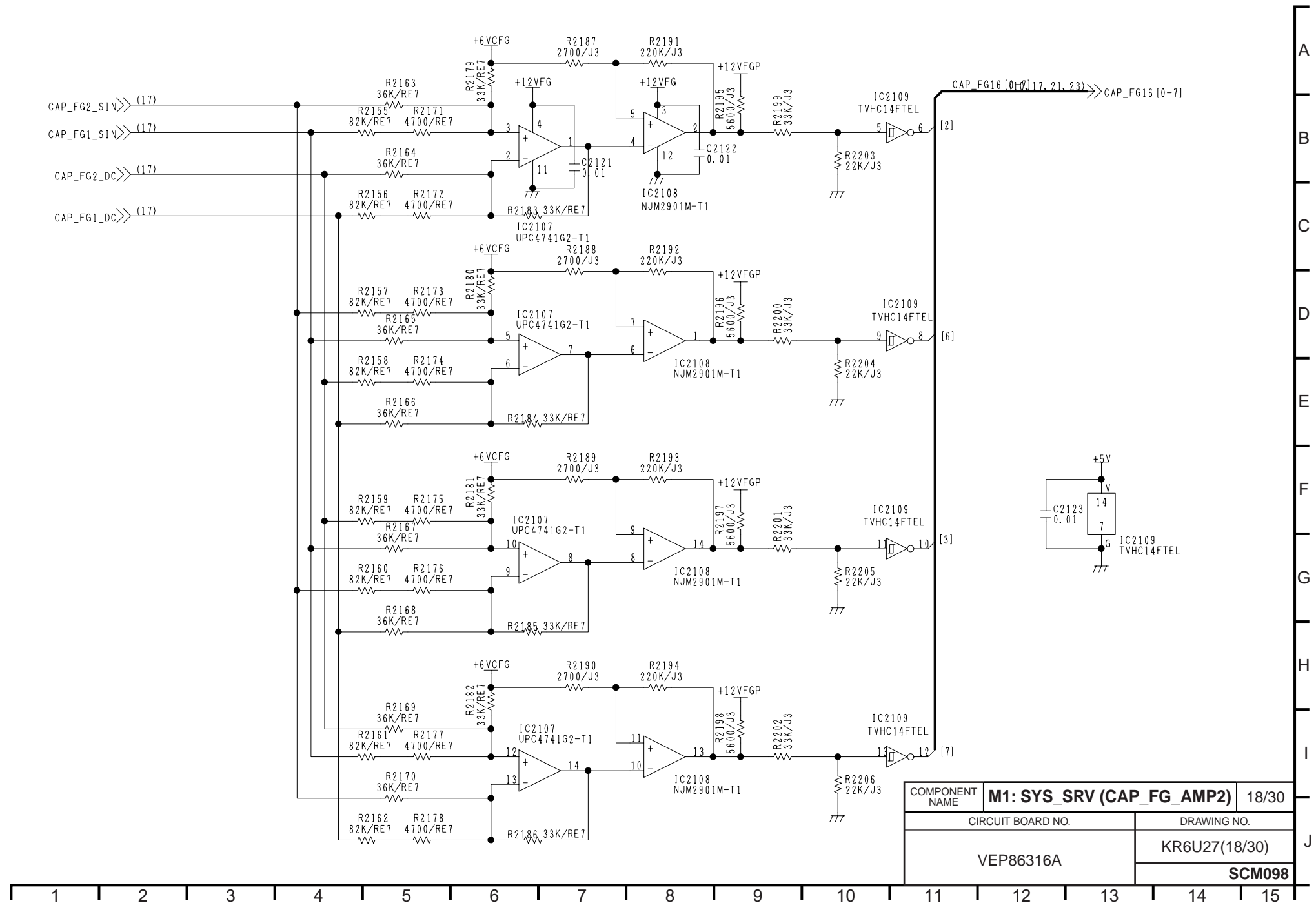




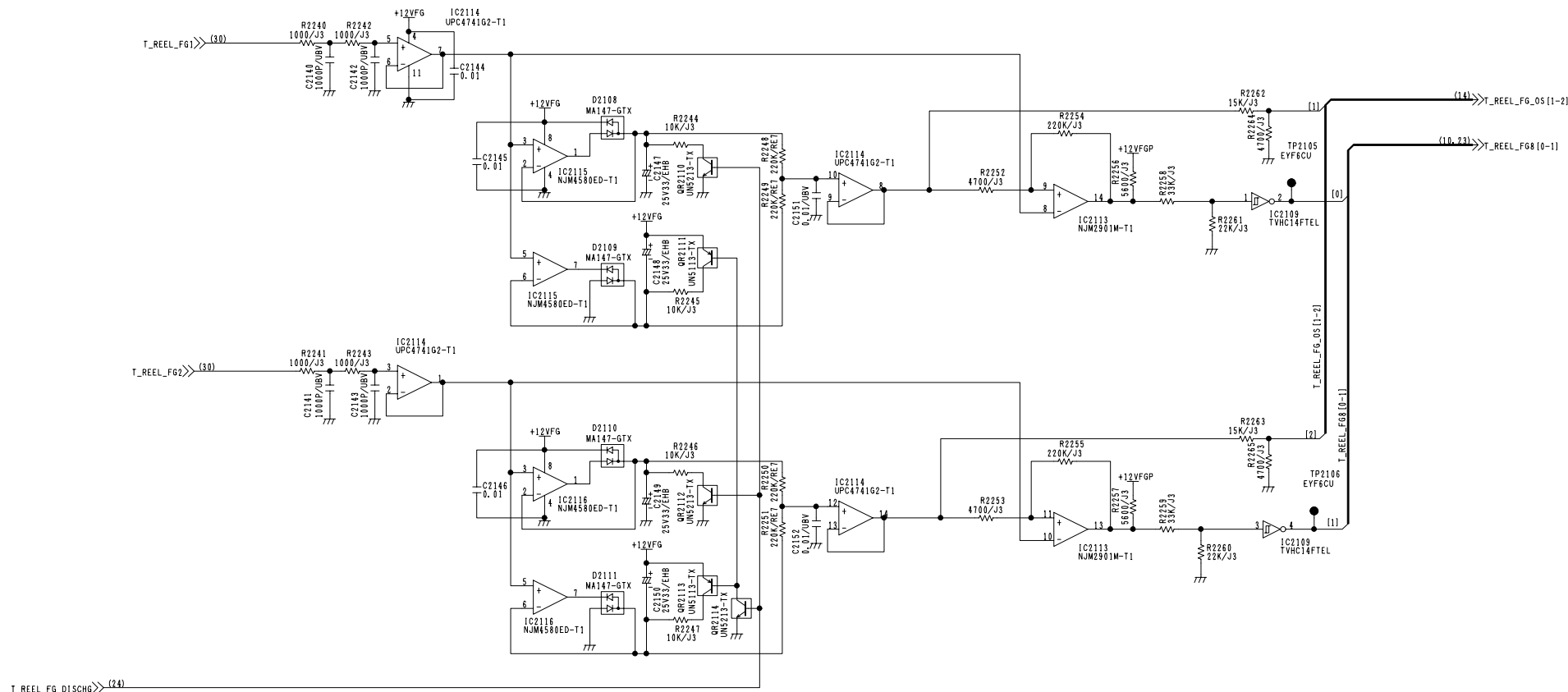
COMPONENT NAME	M1: SYS_SRV (CTL_AMP2)	16/30
CIRCUIT BOARD NO.		DRAWING NO.
VEP86316A		KR6U27(16/30)
		SCM096



COMPONENT NAME	M1: SYS_SRV (CAP_FG_AMP1)	17/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(17/30)
		SCM097

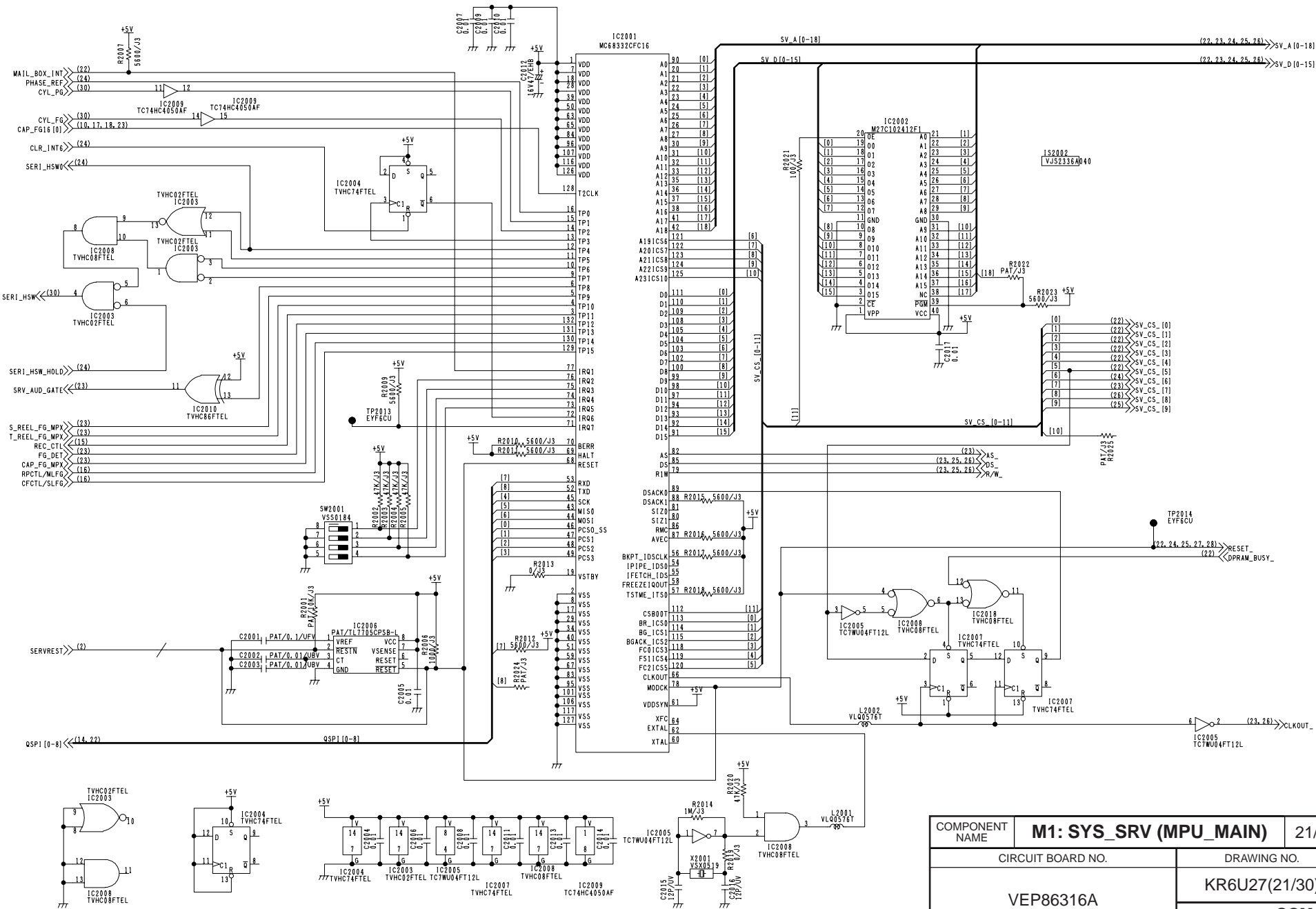


COMPONENT NAME	M1: SYS_SRV (CAP_FG_AMP2)	18/30
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86316A		KR6U27(18/30)
		SCM098

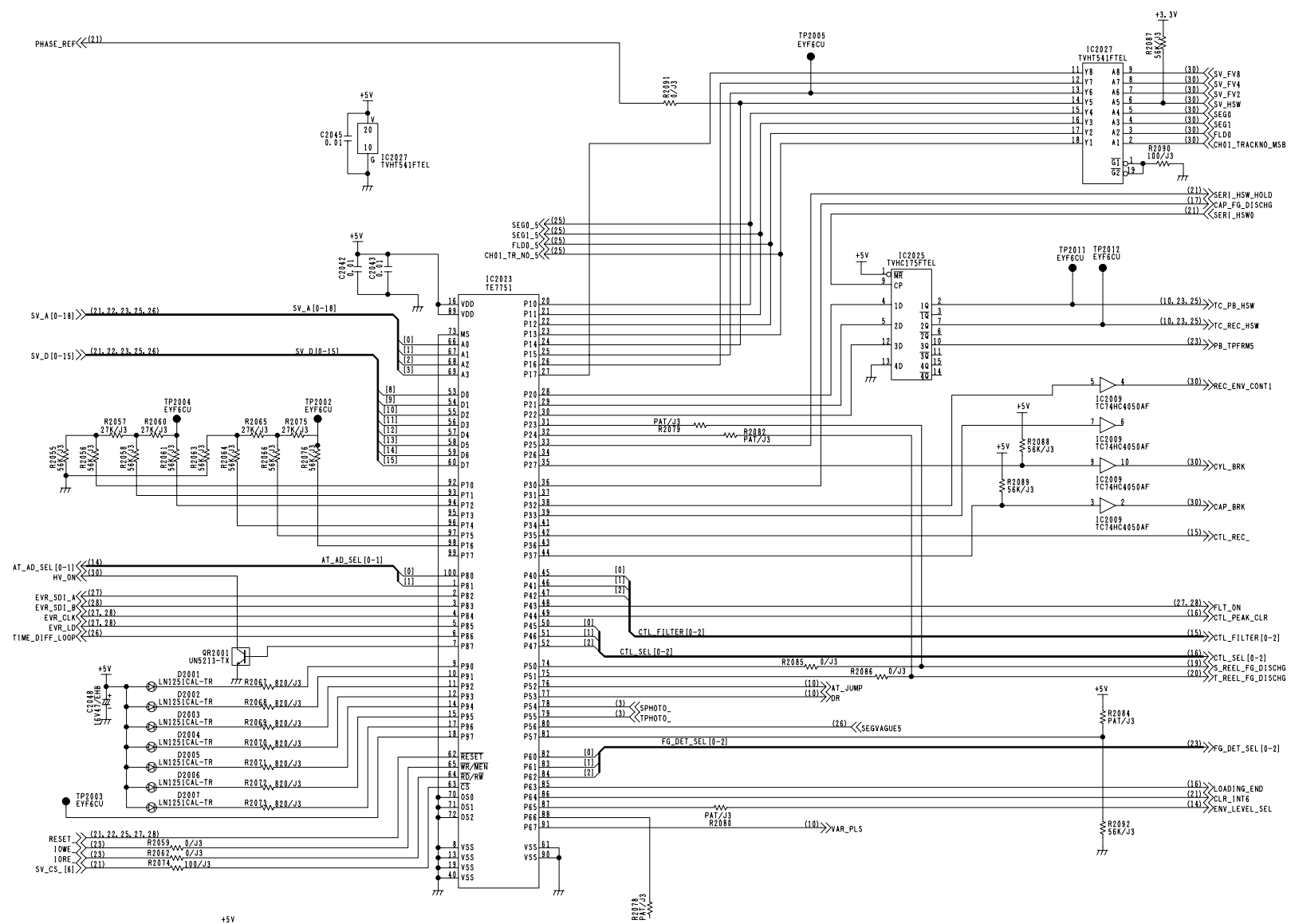


T_REEL_FG_DISCHG>>(24)

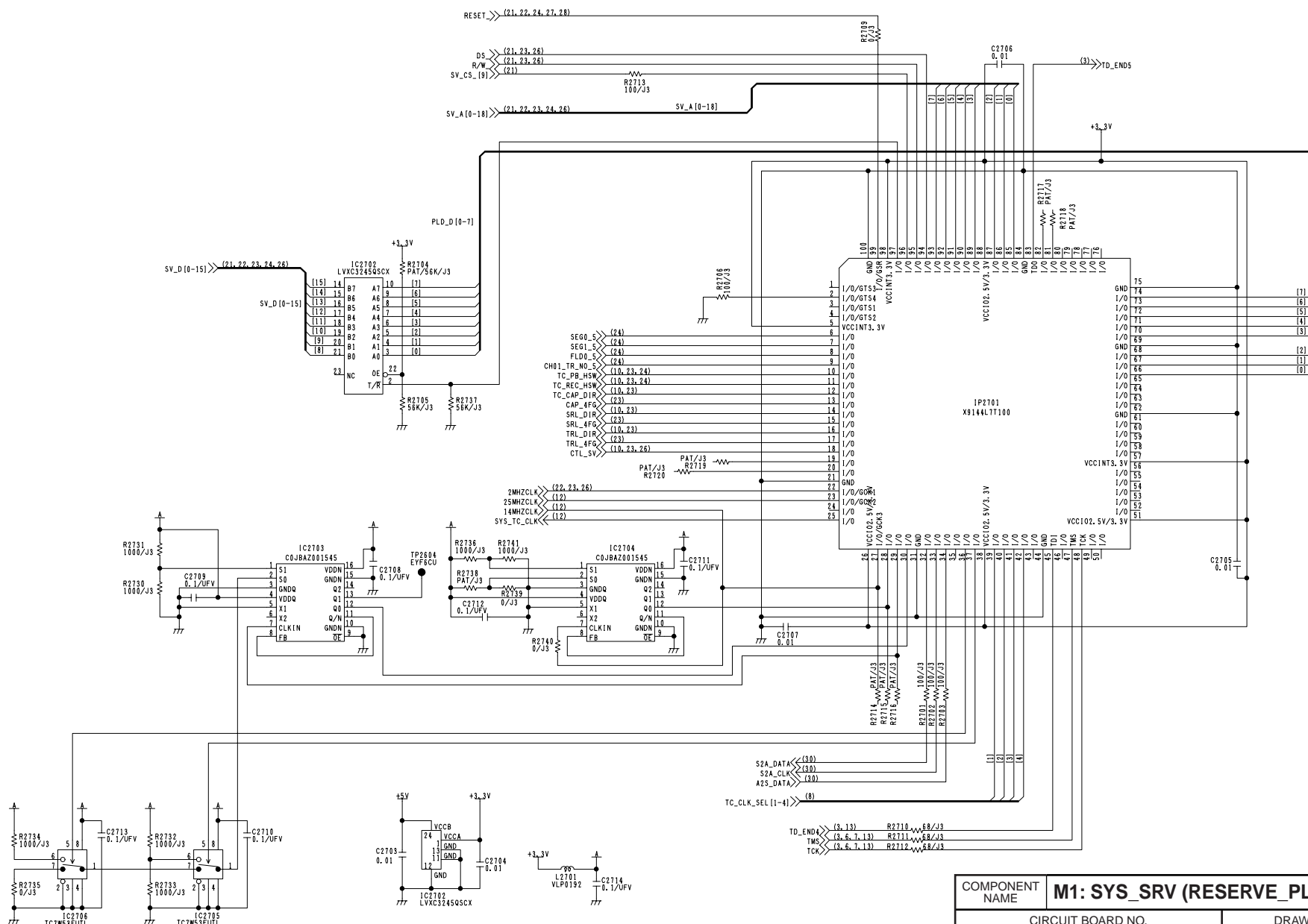
COMPONENT NAME	M1: SYS_SRV (T_FG_AMP)	20/30
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86316A	KR6U27(20/30)	
	SCM100	



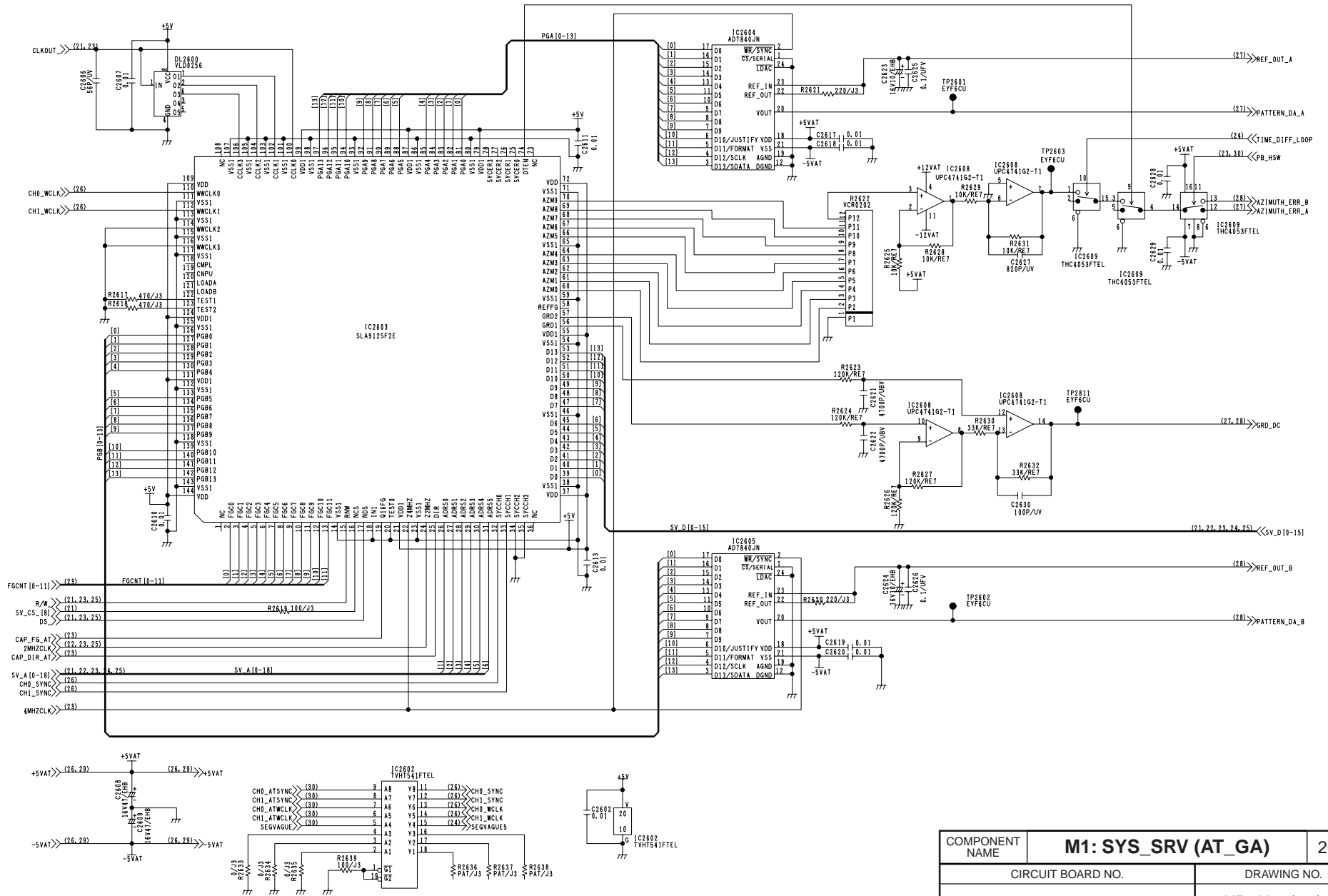
COMPONENT NAME	M1: SYS_SRV (MPU_MAIN)	21/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(21/30)
		SCM101



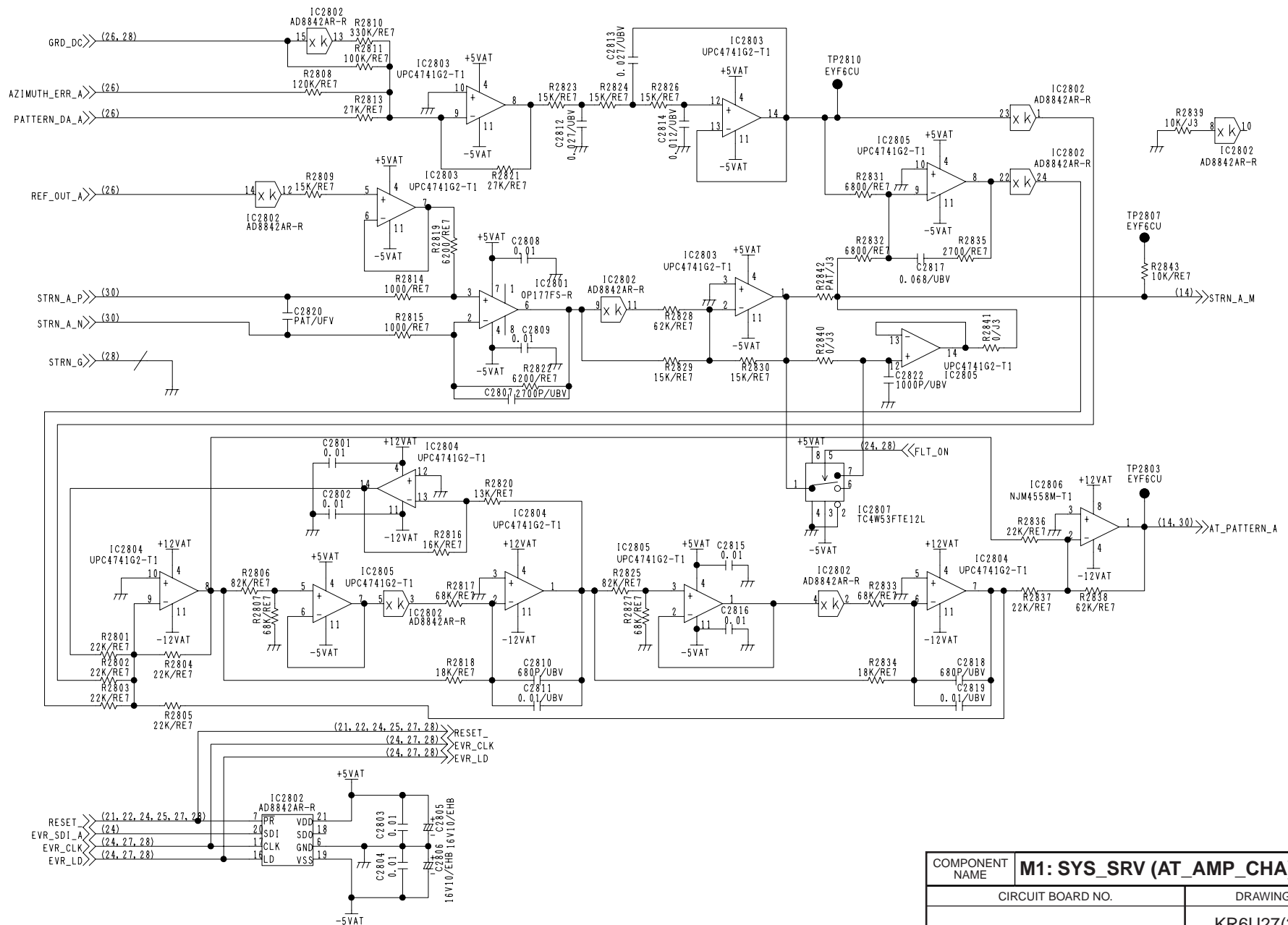
COMPONENT NAME	M1: SYS_SRV (IO_PORT)	24/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(24/30)
		SCM104



COMPONENT NAME	M1: SYS_SRV (RESERVE_PLD)	25/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(25/30)
		SCM105



COMPONENT NAME	M1: SYS_SRV (AT_GA)	26/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(26/30)
		SCM106



A

B

C

D

E

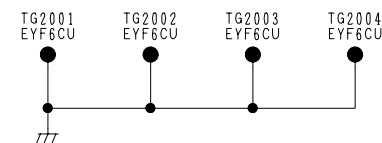
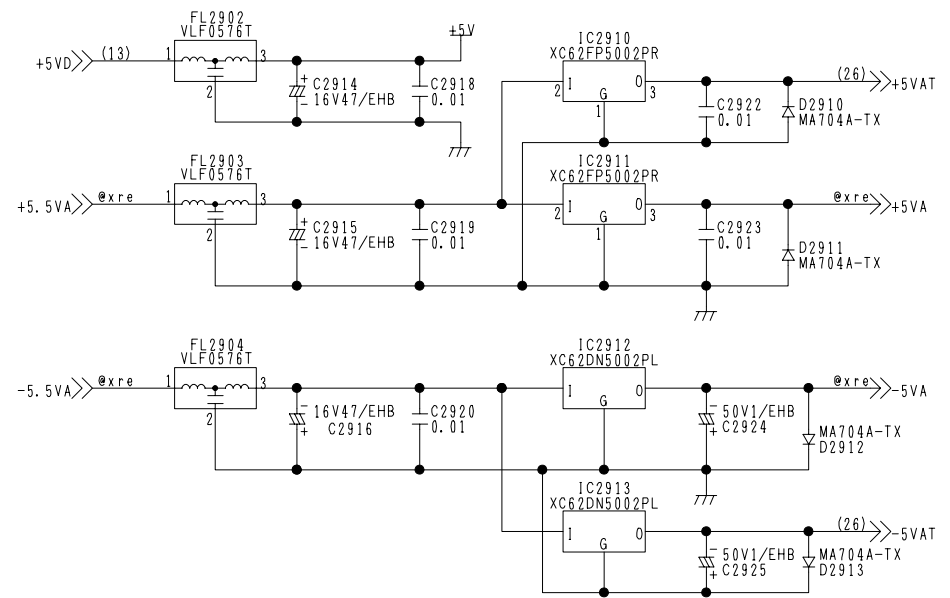
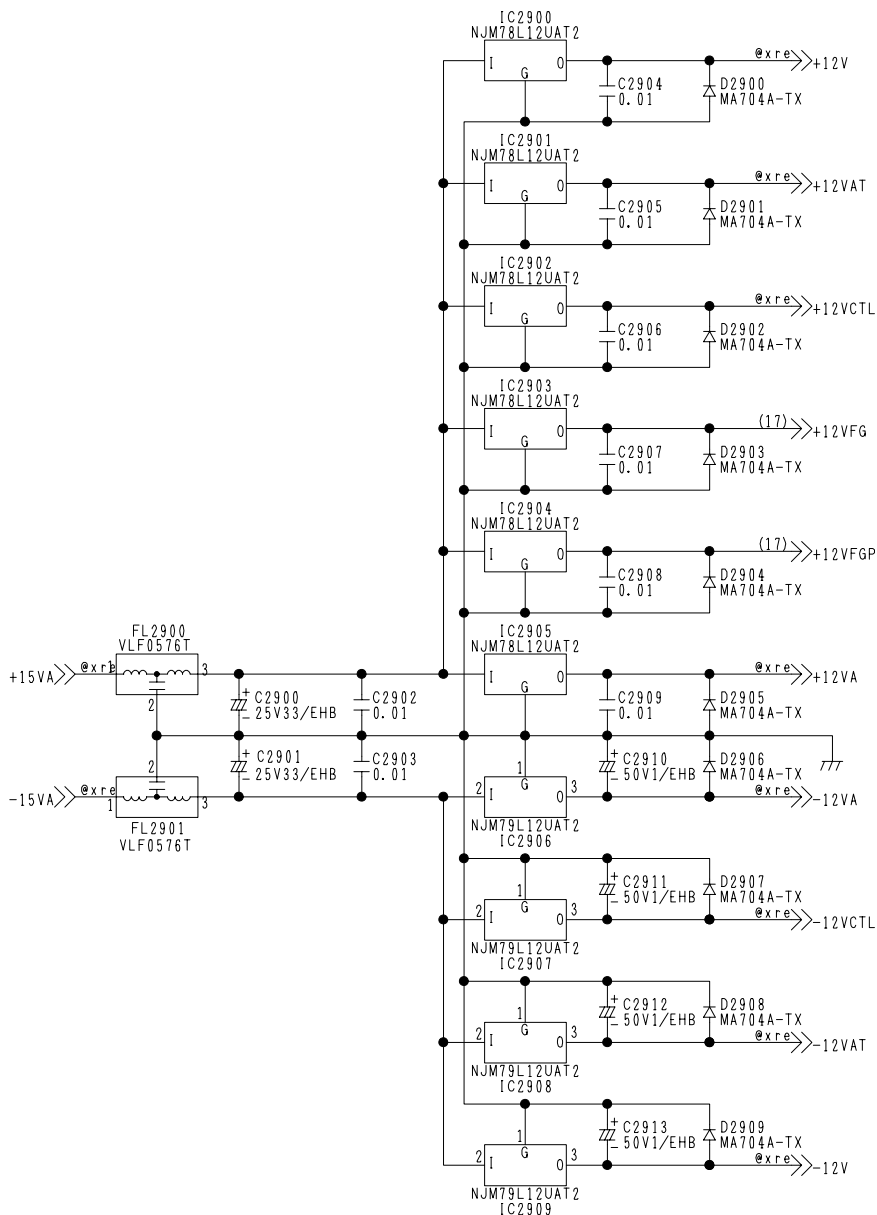
F

G

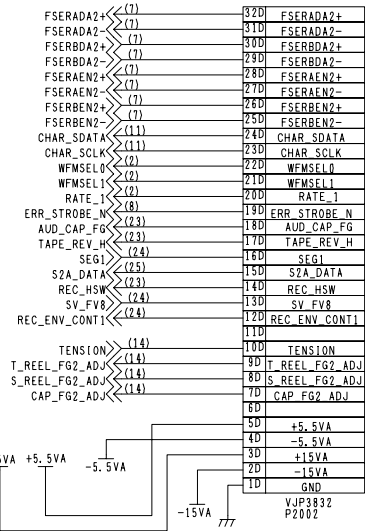
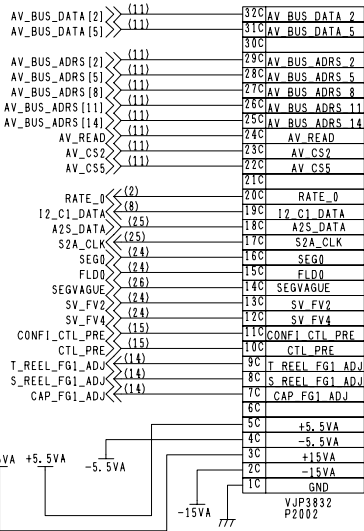
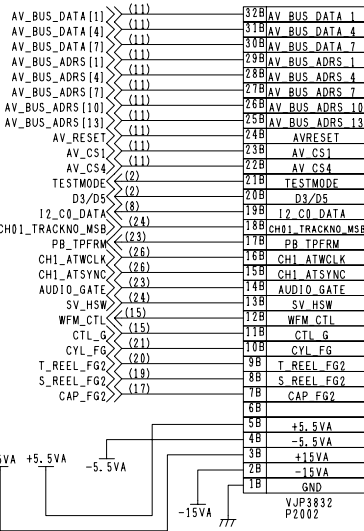
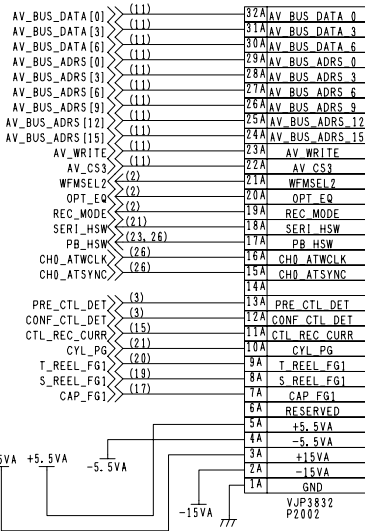
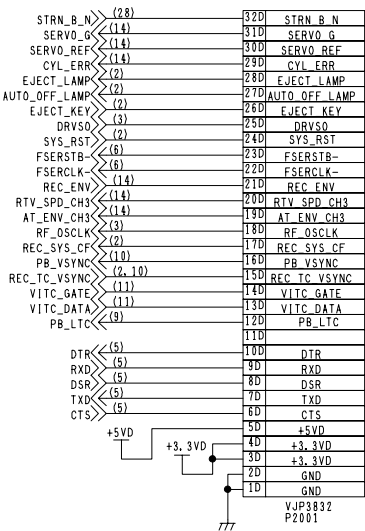
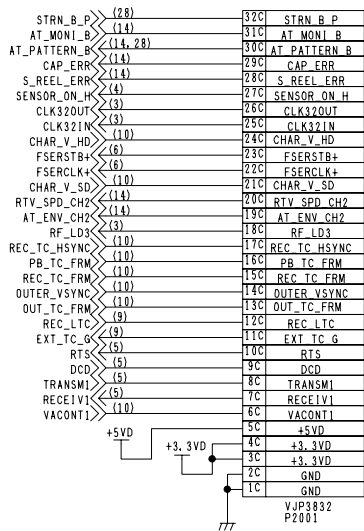
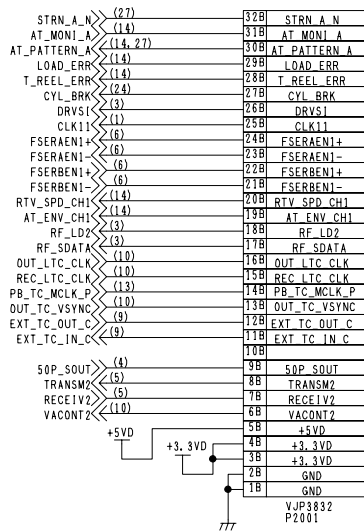
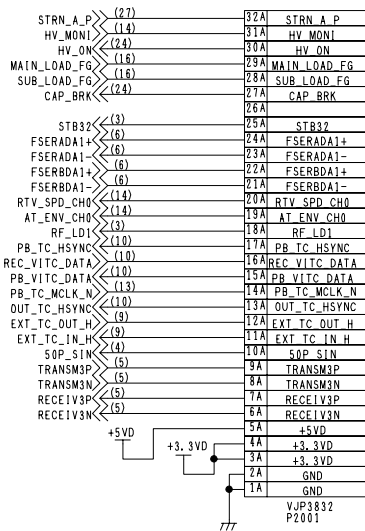
H

I

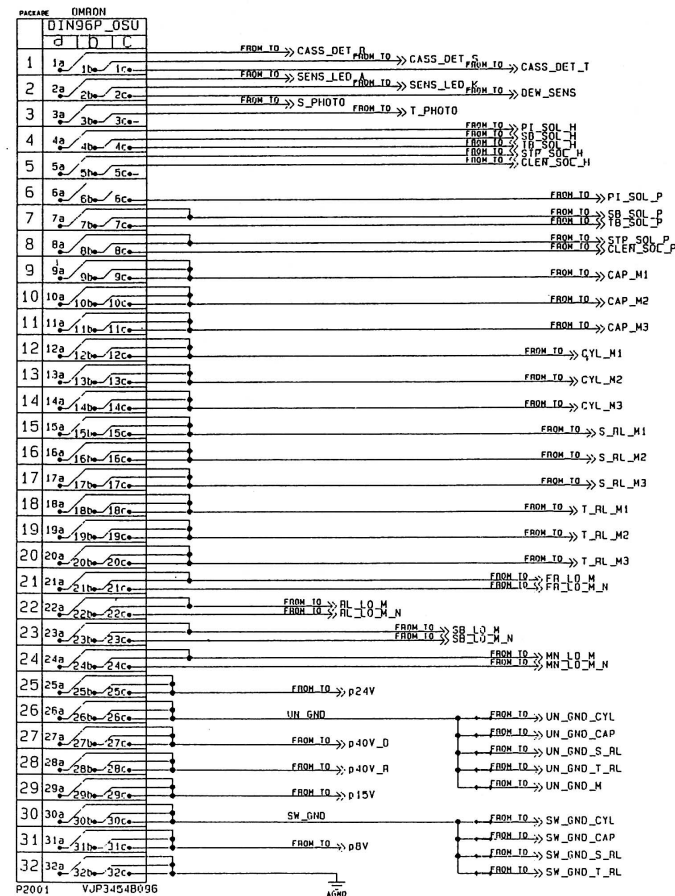
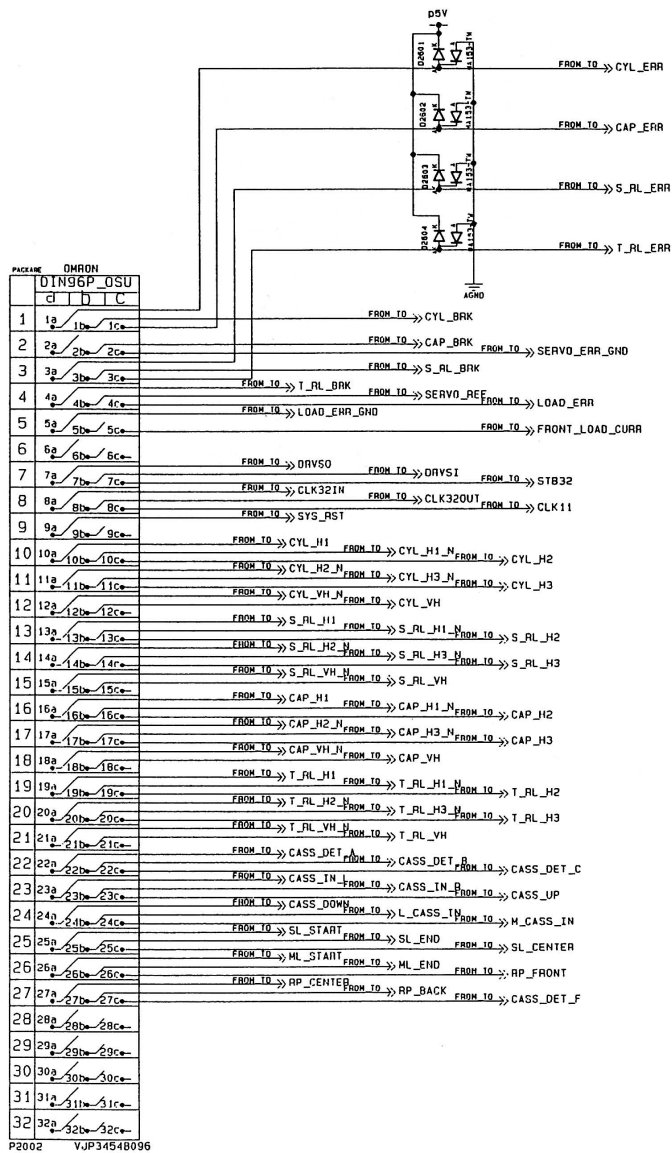
J



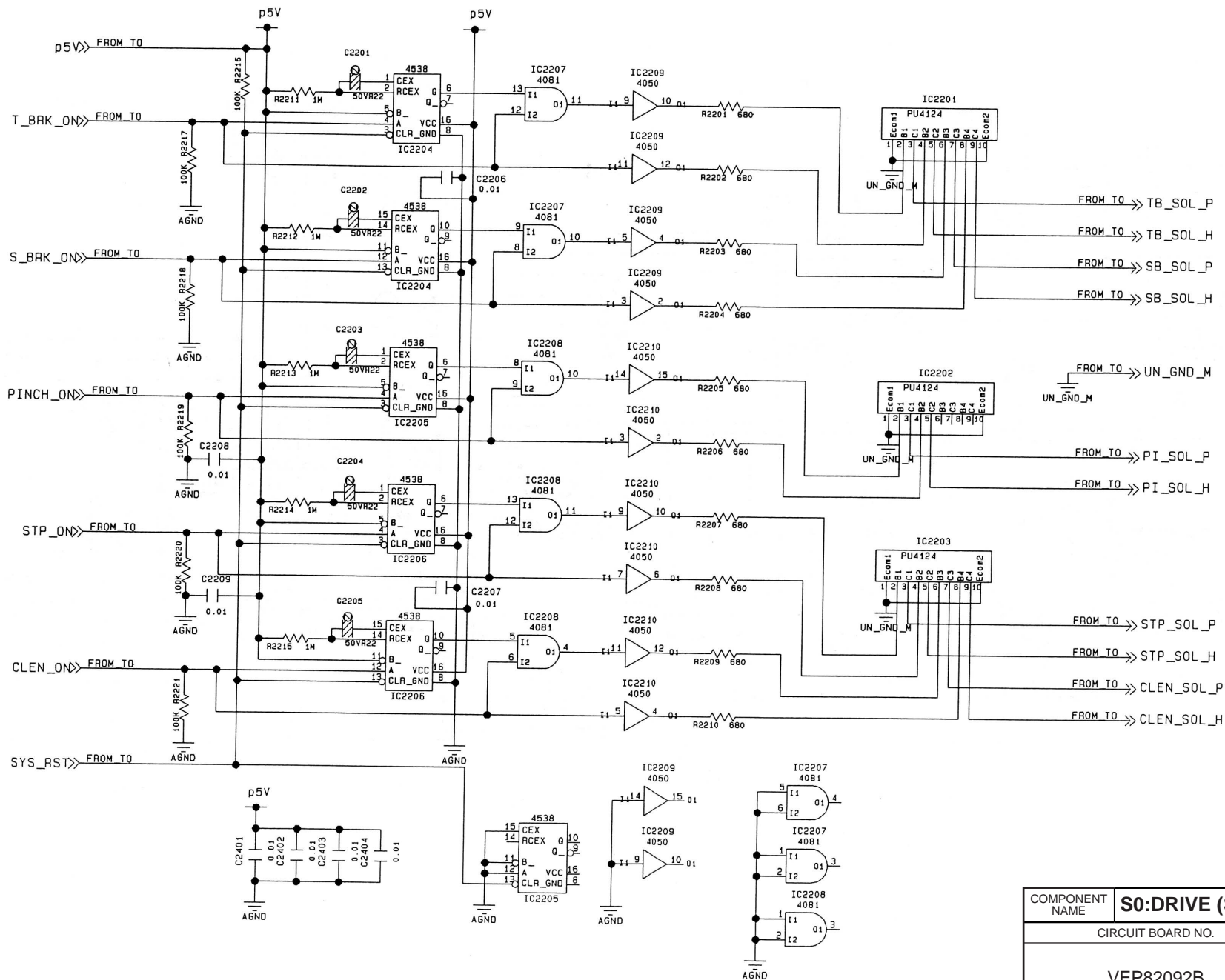
COMPONENT NAME	M1: SYS_SRV (REGULATOR)		29/30
CIRCUIT BOARD NO.		DRAWING NO.	
VEP86316A		KR6U27(29/30)	
		SCM109	



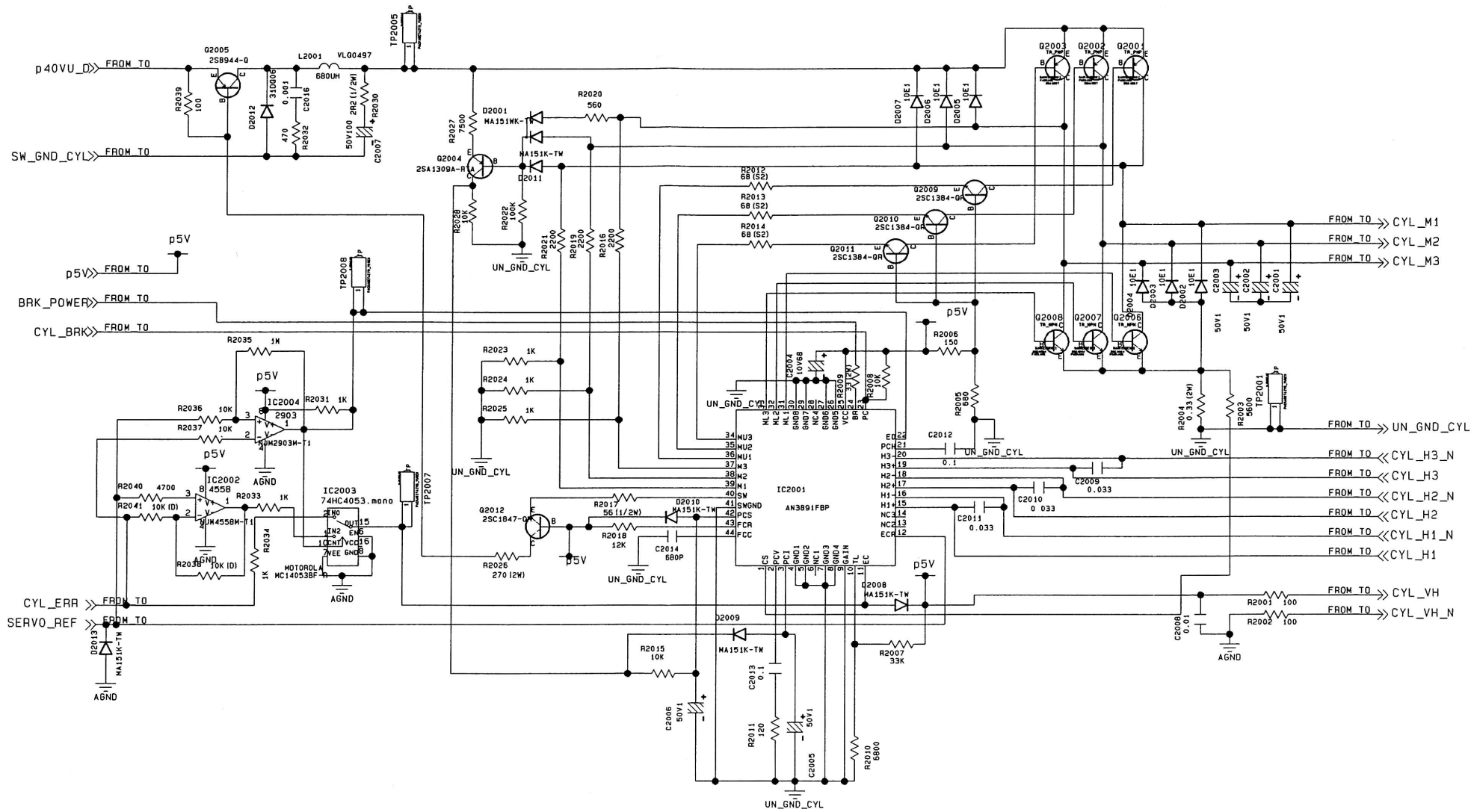
COMPONENT NAME	M1: SYS_SRV (CONNECTOR)	30/30
CIRCUIT BOARD NO.	VEP86316A	DRAWING NO.
		KR6U27(30/30)
		SCM110



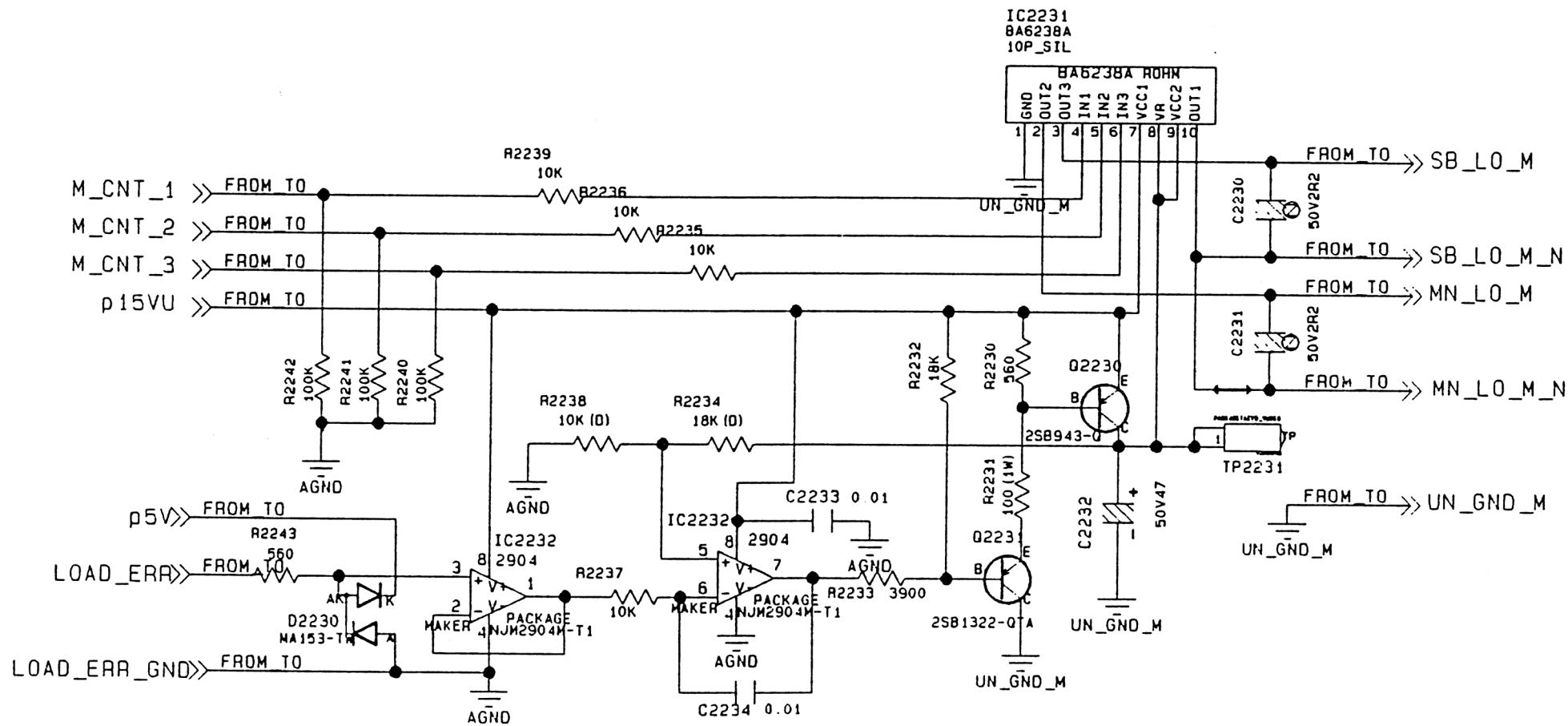
COMPONENT NAME	S0:DRIVE (CONNECTOR)	01/11
CIRCUIT BOARD NO.	VEP82092B	DRAWING NO.
		SCM111



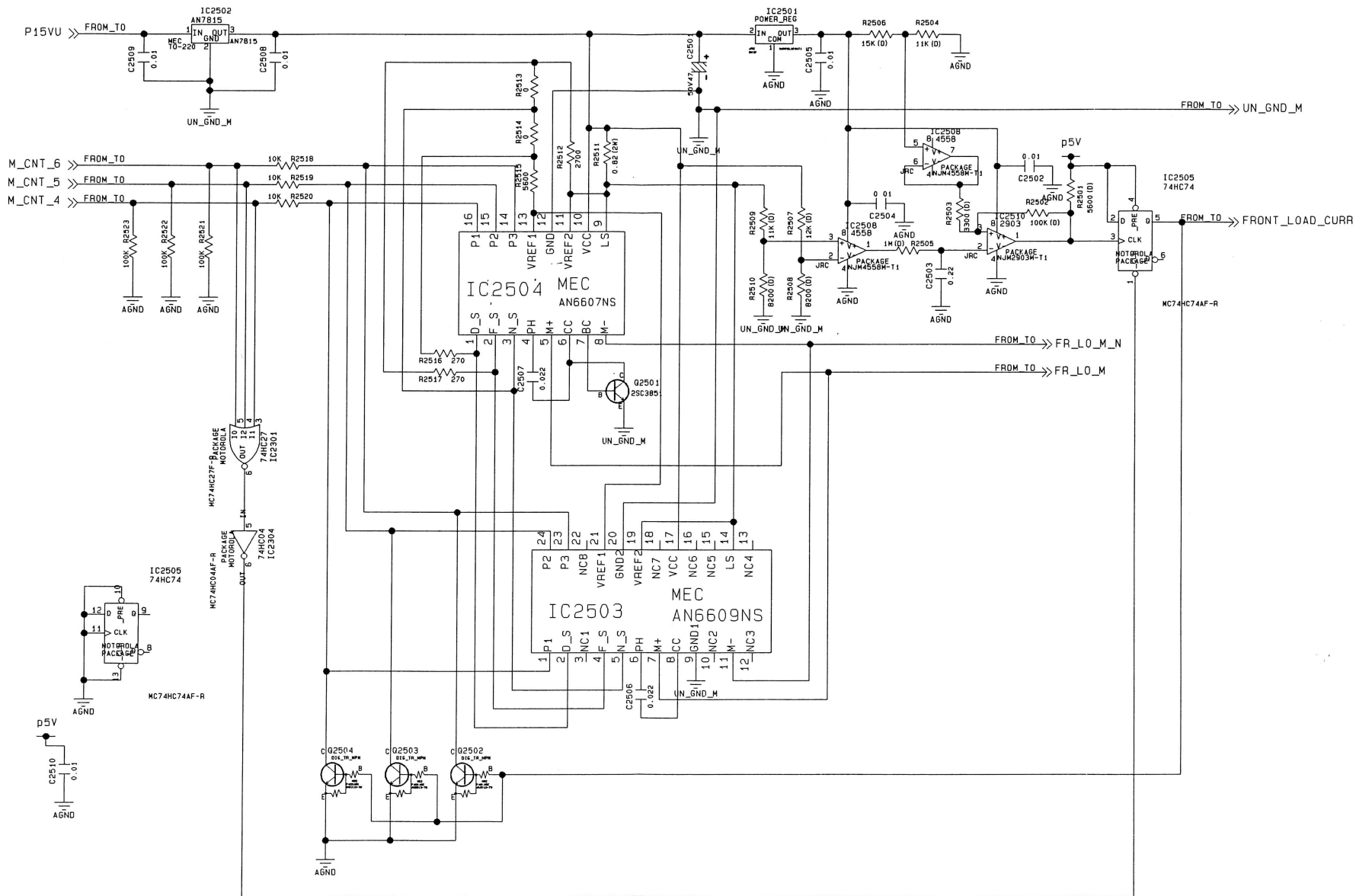
COMPONENT NAME	S0:DRIVE (SOLENOID DRIVE)	02/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82092B		SCM112



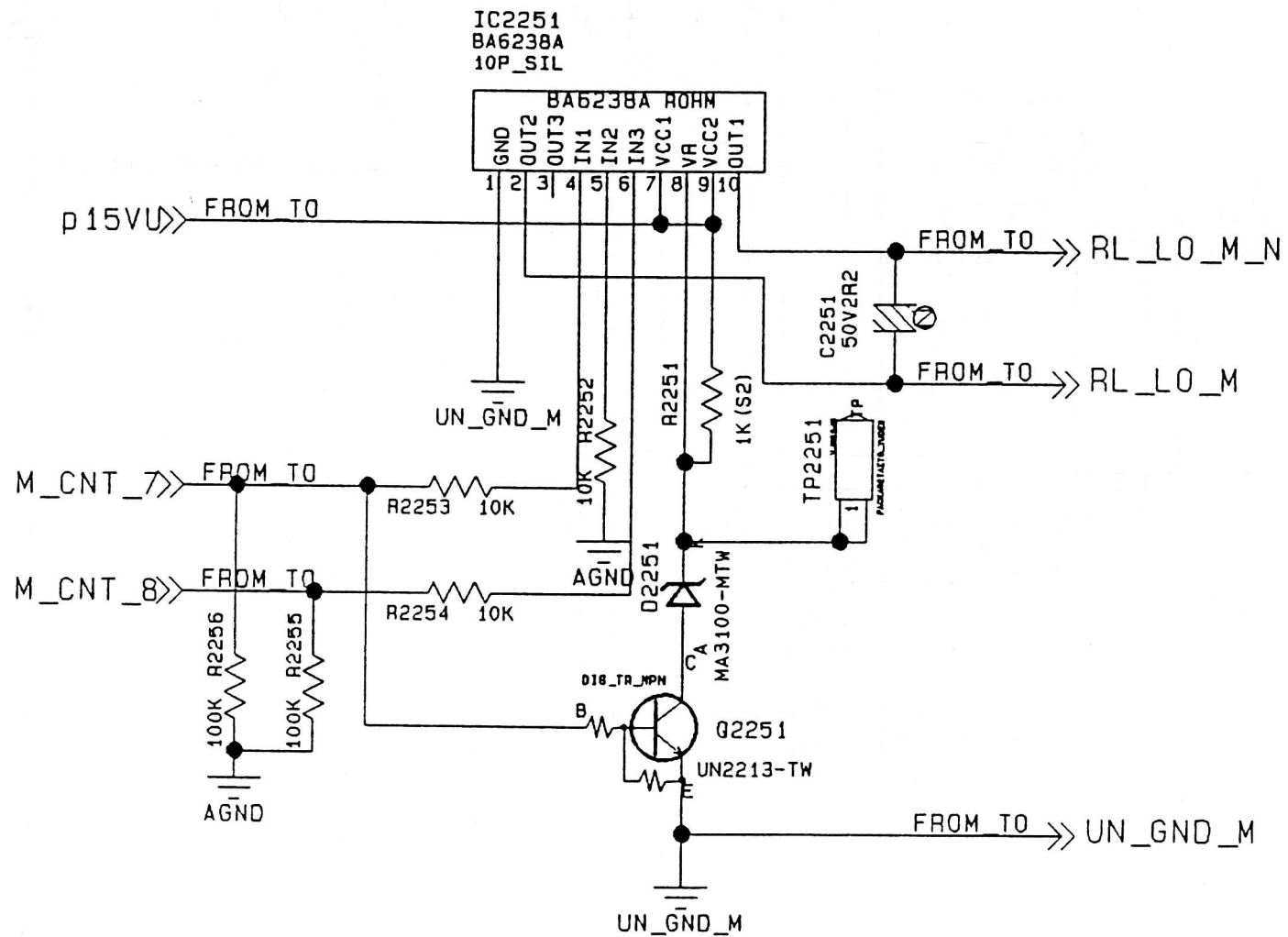
COMPONENT NAME	S0:DRIVE (CYLINDER DRIVE)		04/11
CIRCUIT BOARD NO.		DRAWING NO.	
VEP82092B			
		SCM114	



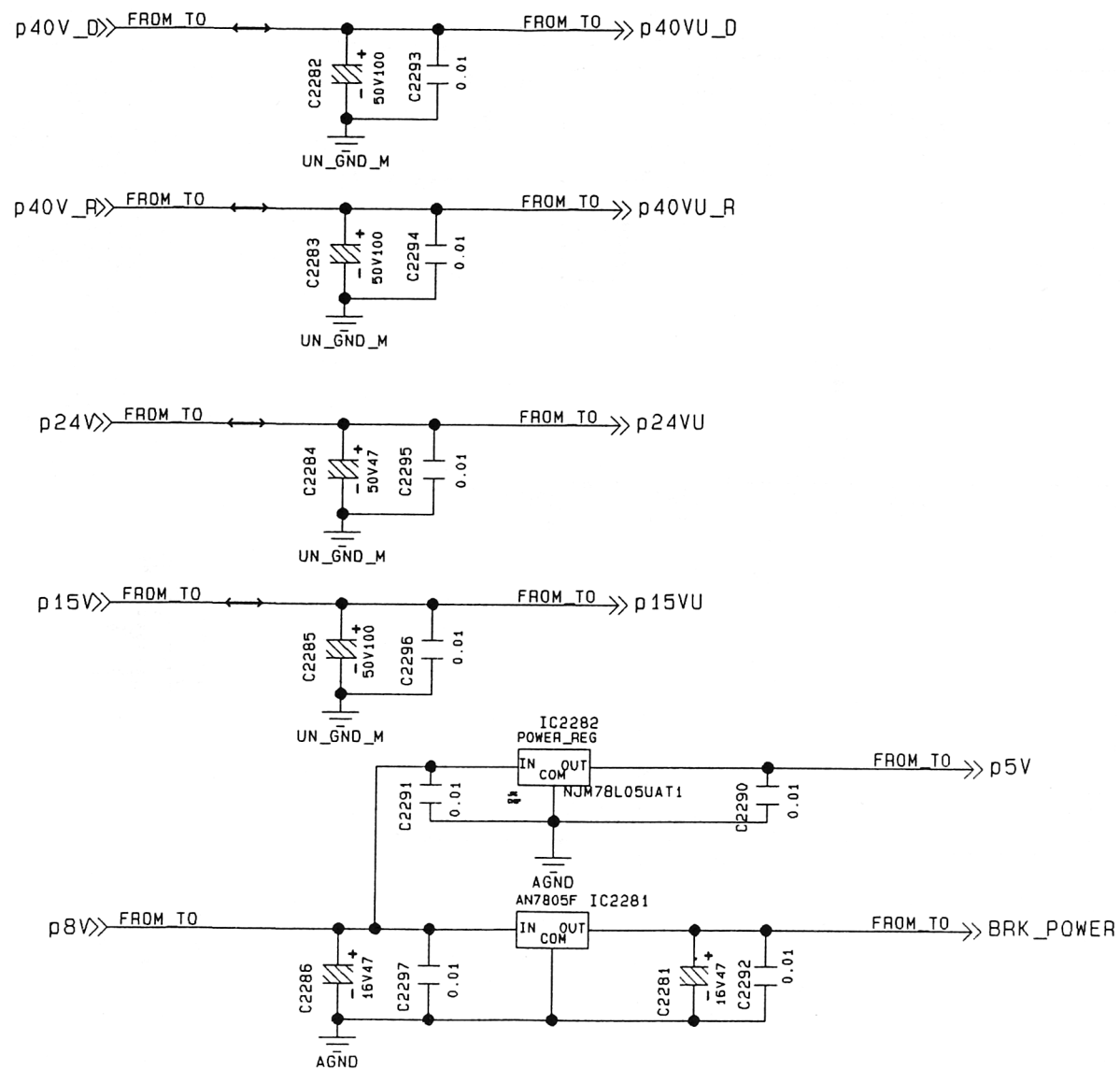
COMPONENT NAME	S0:DRIVE (MAIN SUB DRIVE)	07/11
CIRCUIT BOARD NO.	VEP82092B	DRAWING NO.
		SCM117



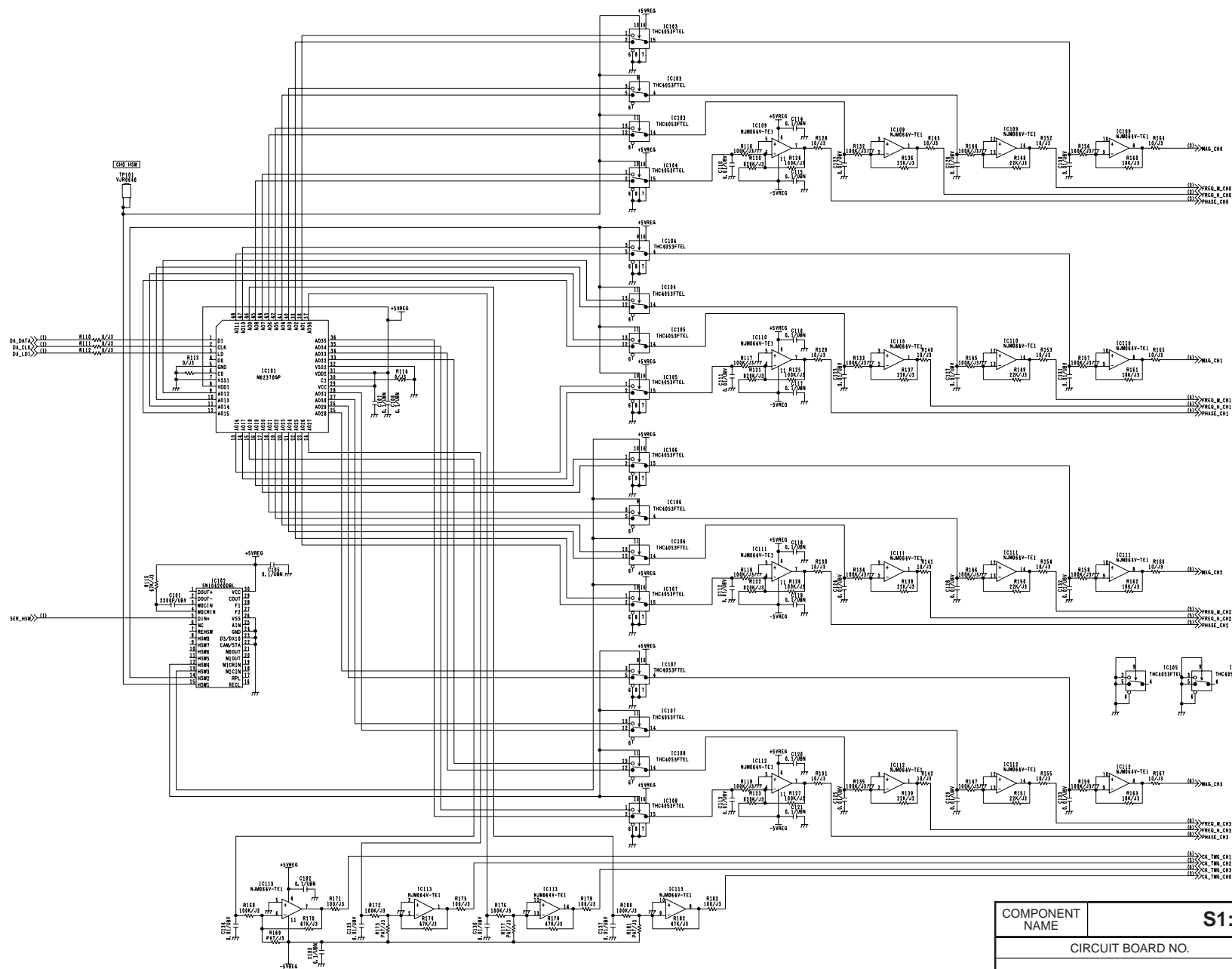
COMPONENT NAME	S0:DRIVE (MECHANISM DRIVE)	08/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82092B		
	SCM118	



COMPONENT NAME	S0:DRIVE (GARAGE DRIVE)	09/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82092B		
	SCM119	



COMPONENT NAME	S0:DRIVE (POWER REGULATOR)		11/11
CIRCUIT BOARD NO.		DRAWING NO.	
VEP82092B			
		SCM121	

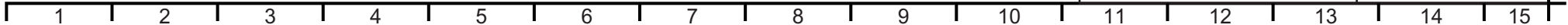


COMPONENT NAME	S1: EQ		02/06
CIRCUIT BOARD NO.		DRAWING NO.	
VEP85198A		KR5596 (02/06)	
		SCM123	

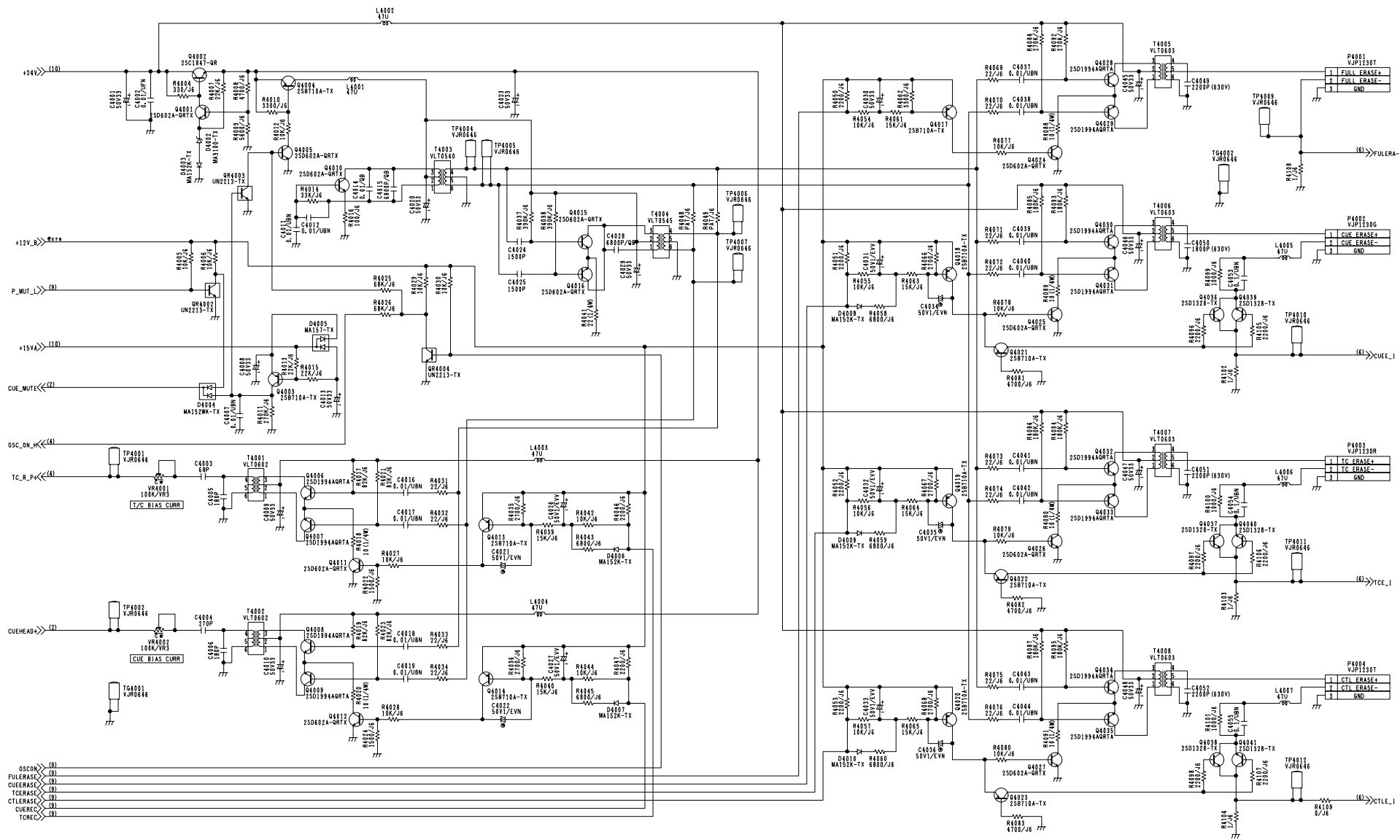
A
B
C
D
E
F
G
H
I
J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

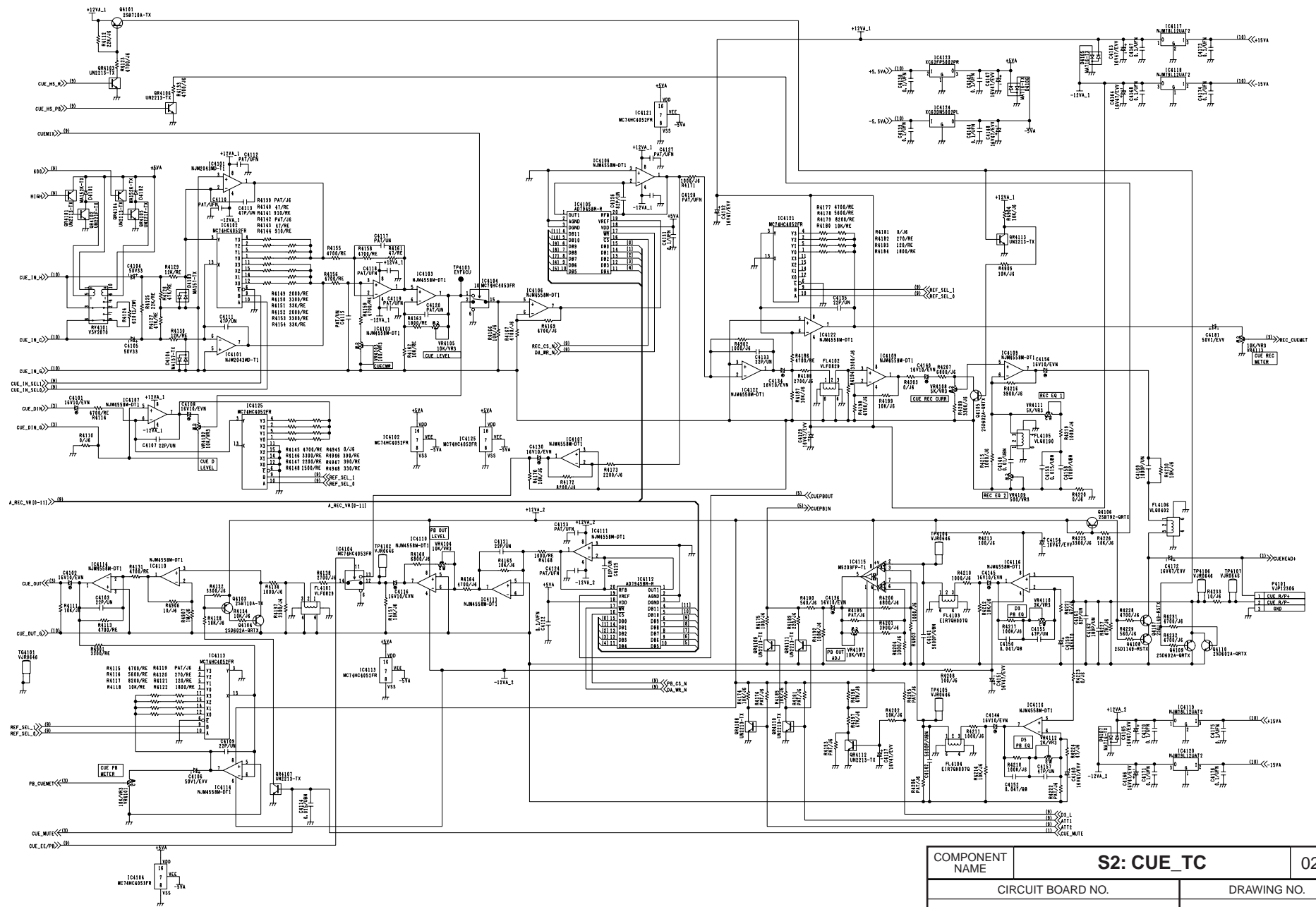




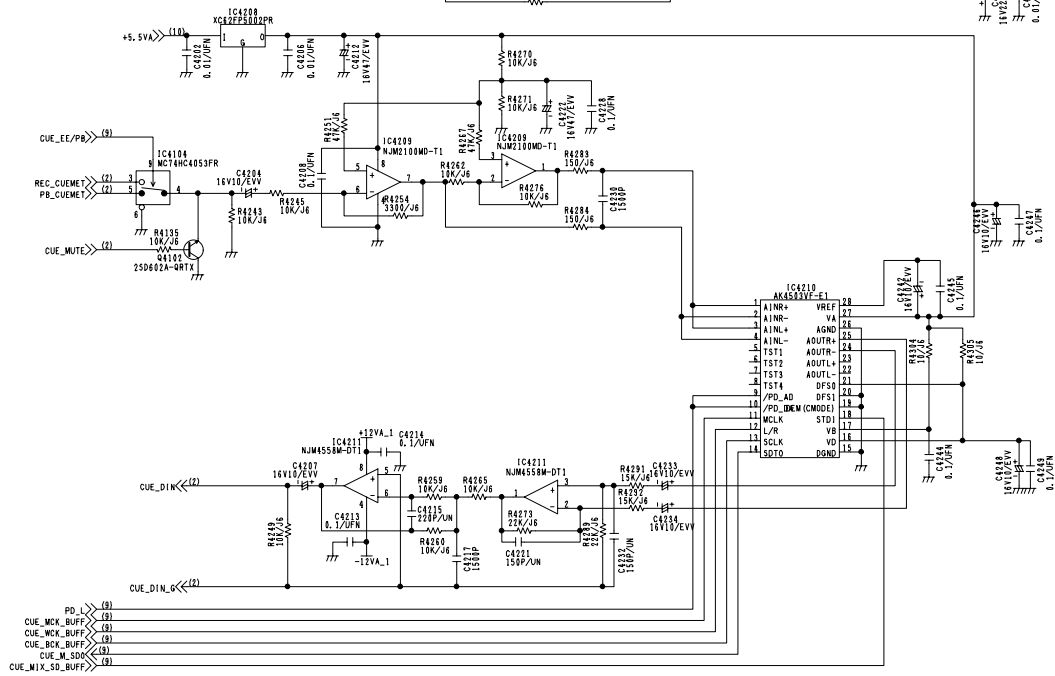
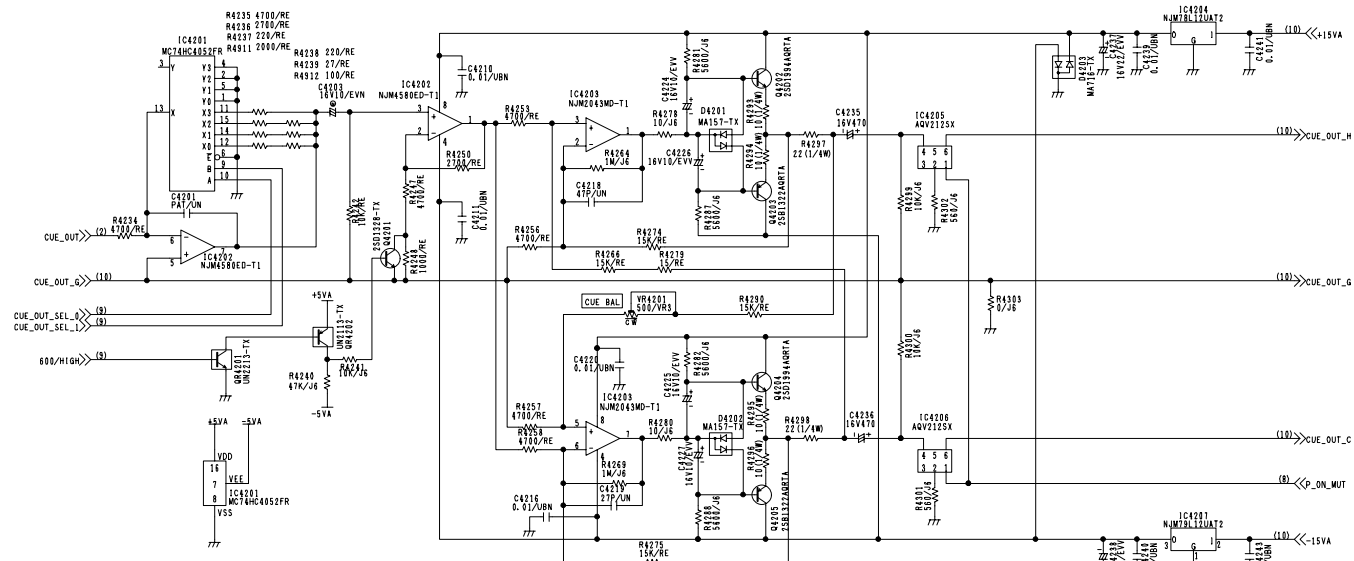




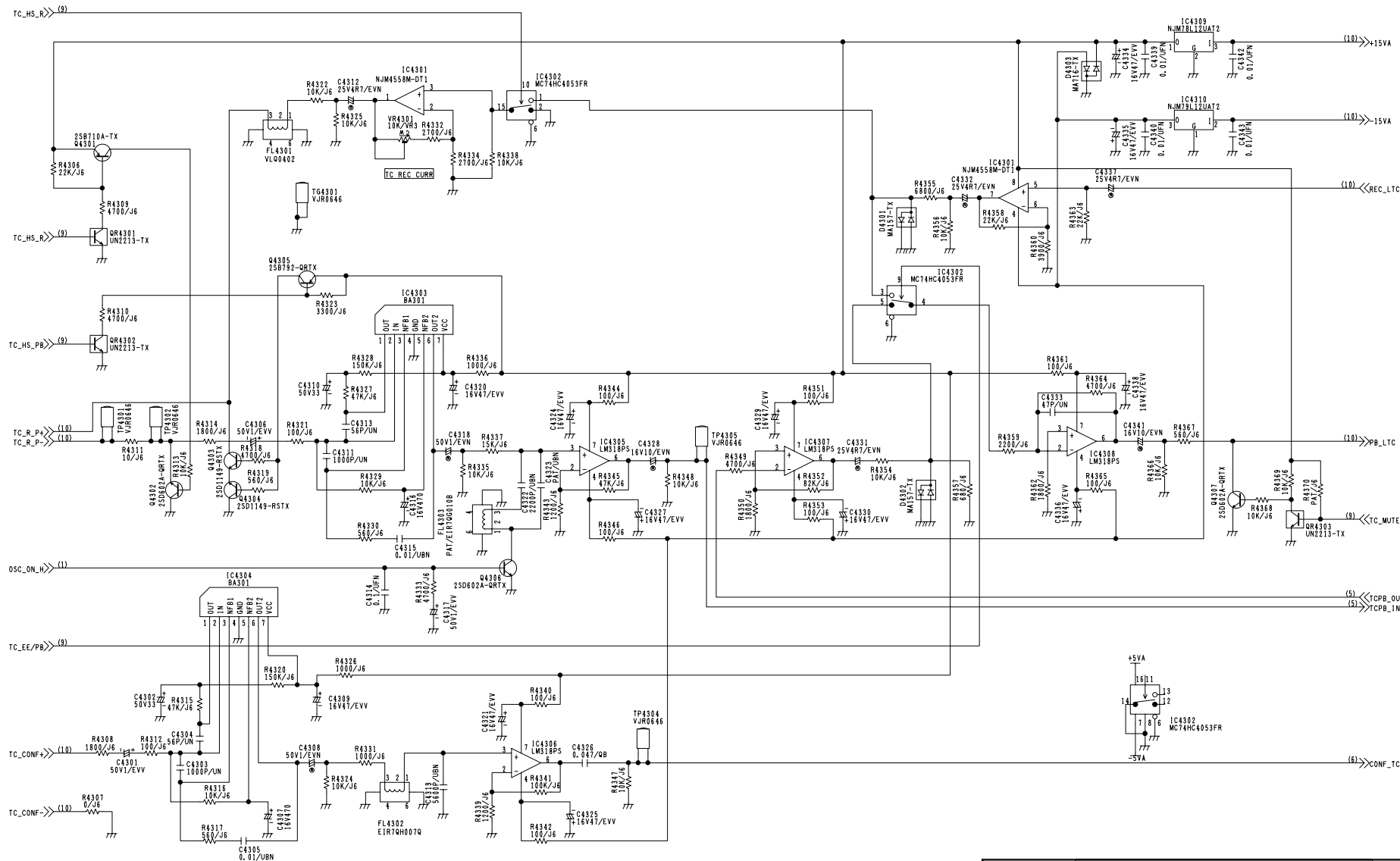
COMPONENT NAME	S2: CUE_TC		01/10
CIRCUIT BOARD NO.		DRAWING NO.	
VEP84351A		KR4J22 (1/10)	
		SCM128	



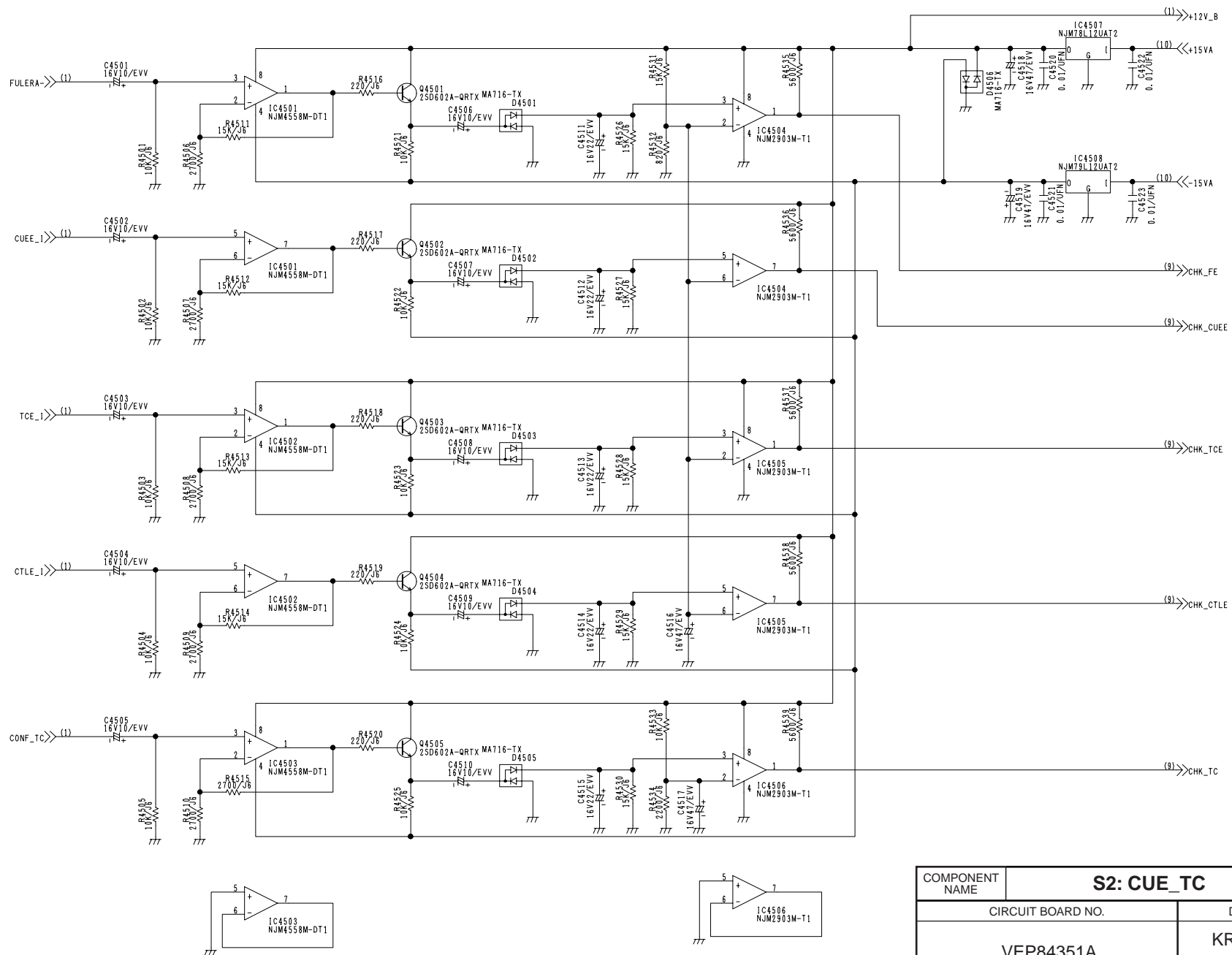
COMPONENT NAME	S2: CUE_TC		02/10
	CIRCUIT BOARD NO.		DRAWING NO.
	VEP84351A		KR4J22 (2/10)
			SCM129



COMPONENT NAME	S2: CUE_TC	03/10
CIRCUIT BOARD NO.	VEP84351A	DRAWING NO. KR4J22 (3/10)
		SCM130



COMPONENT NAME	S2: CUE_TC		04/10
CIRCUIT BOARD NO.		DRAWING NO.	
VEP84351A		KR4J22 (4/10)	
		SCM131	



COMPONENT NAME	S2: CUE_TC		06/10
CIRCUIT BOARD NO.		DRAWING NO.	
VEP84351A		KR4J22 (6/10)	
		SCM133	

A

B

C

D

E

F

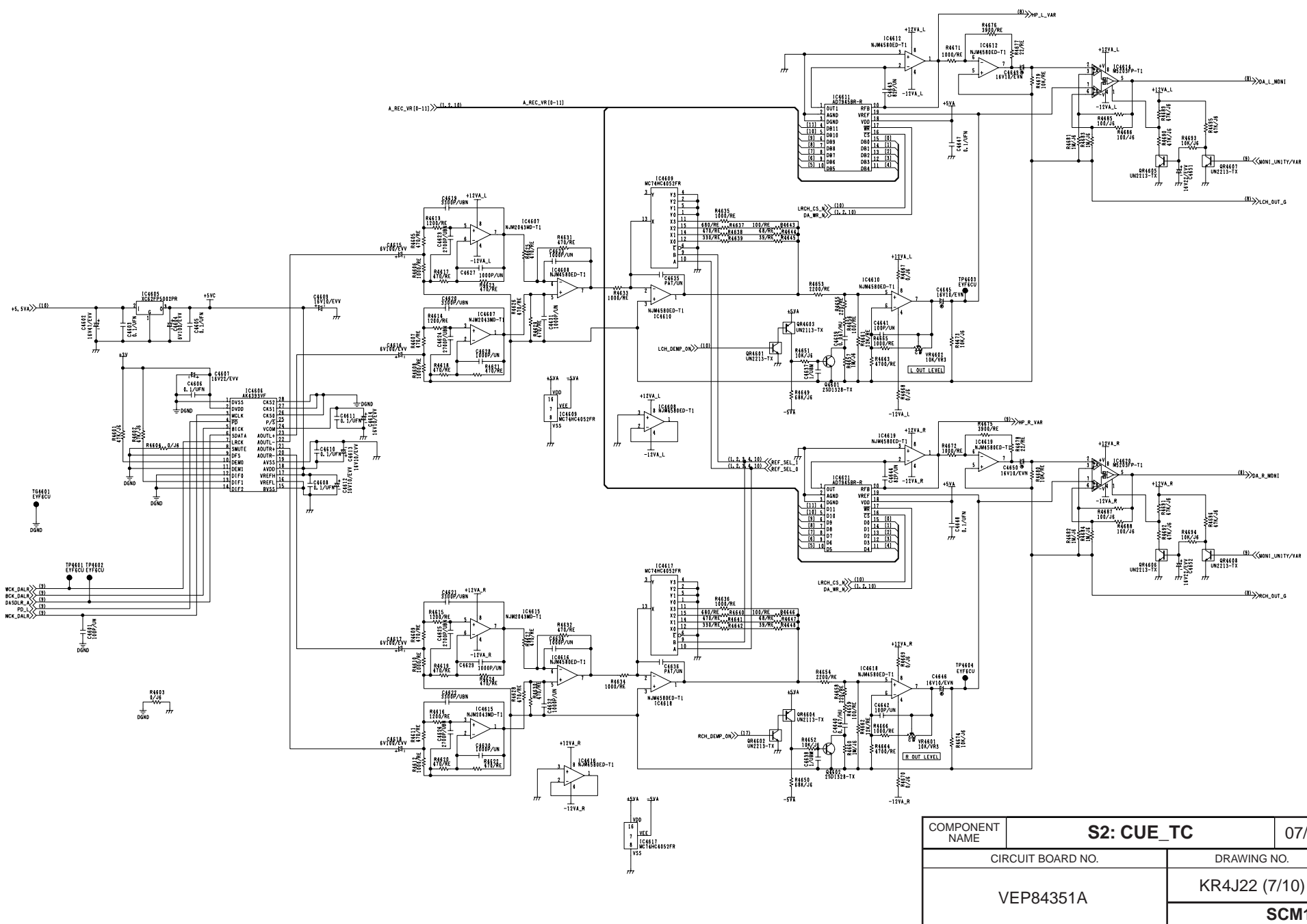
G

H

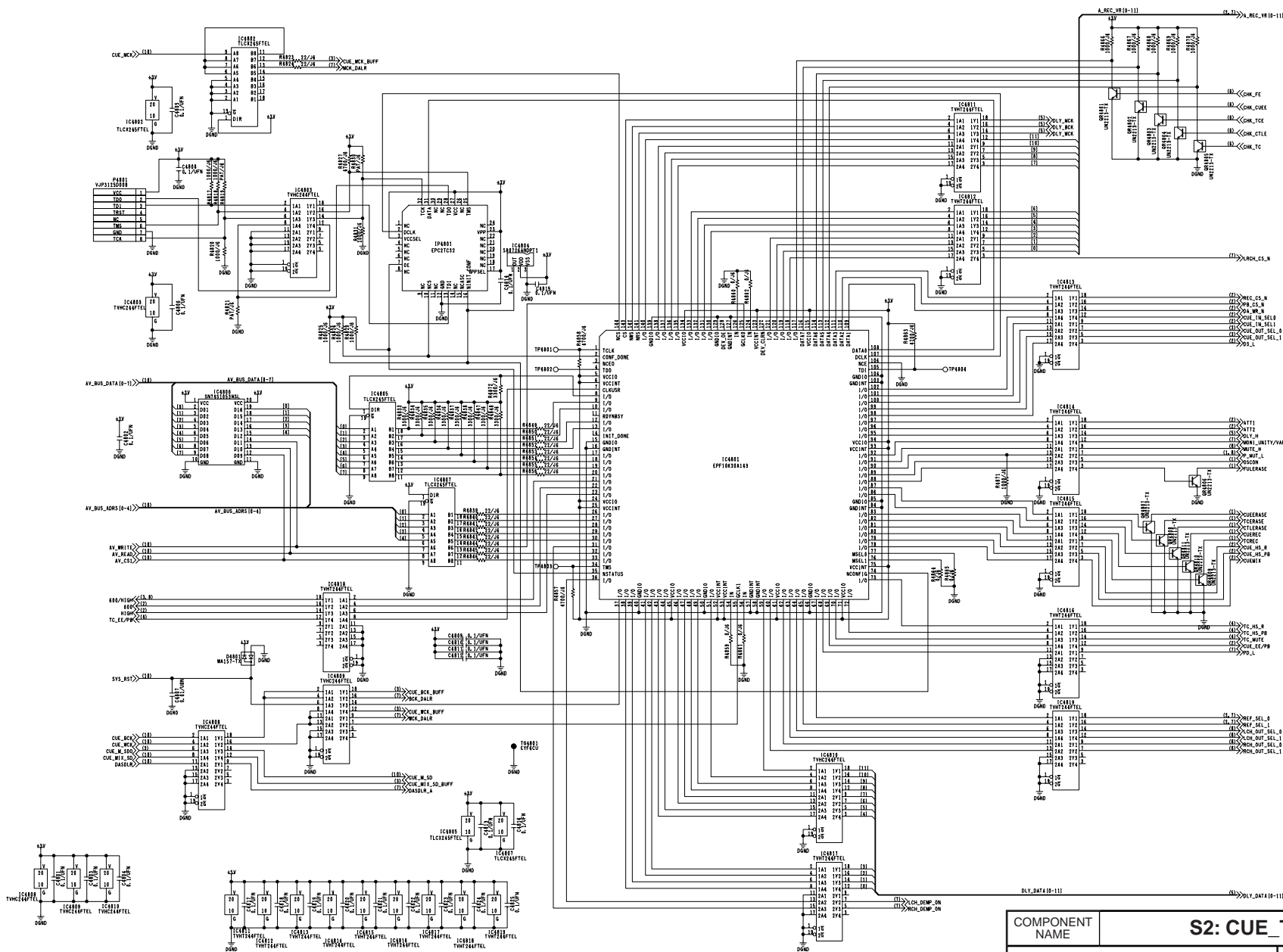
I

J

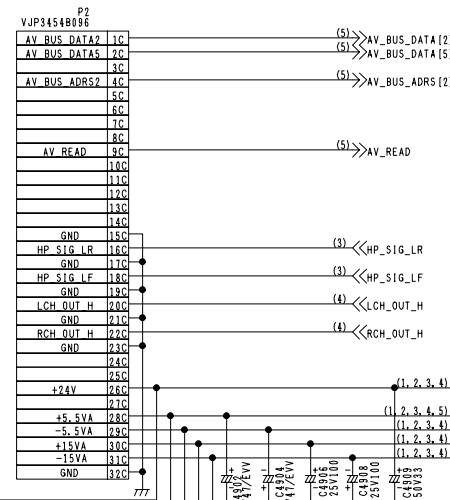
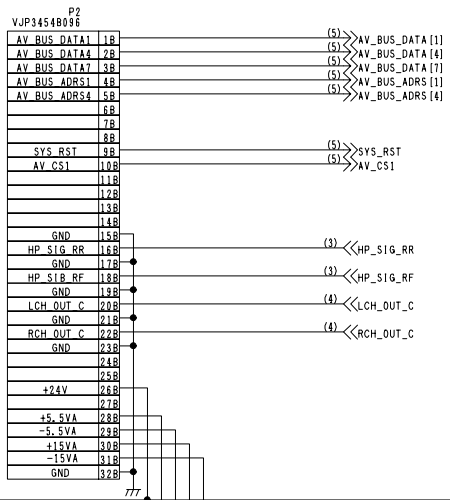
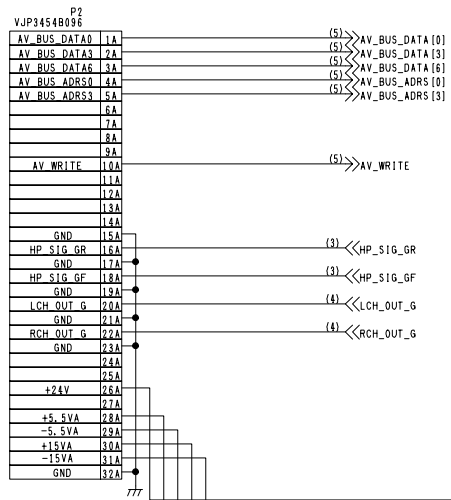
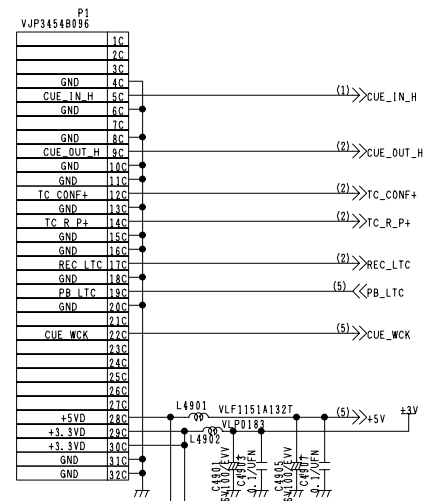
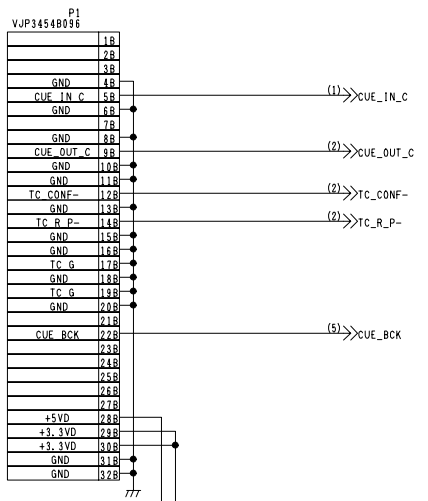
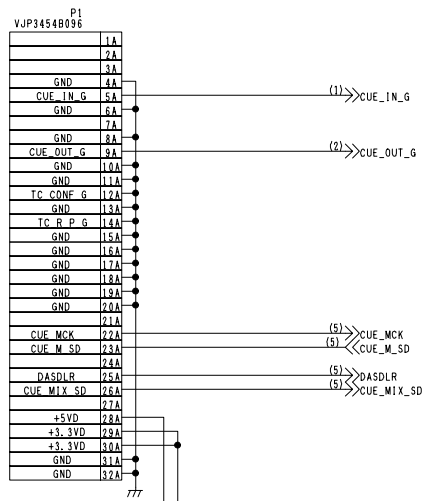
A
B
C
D
E
F
G
H
I
J



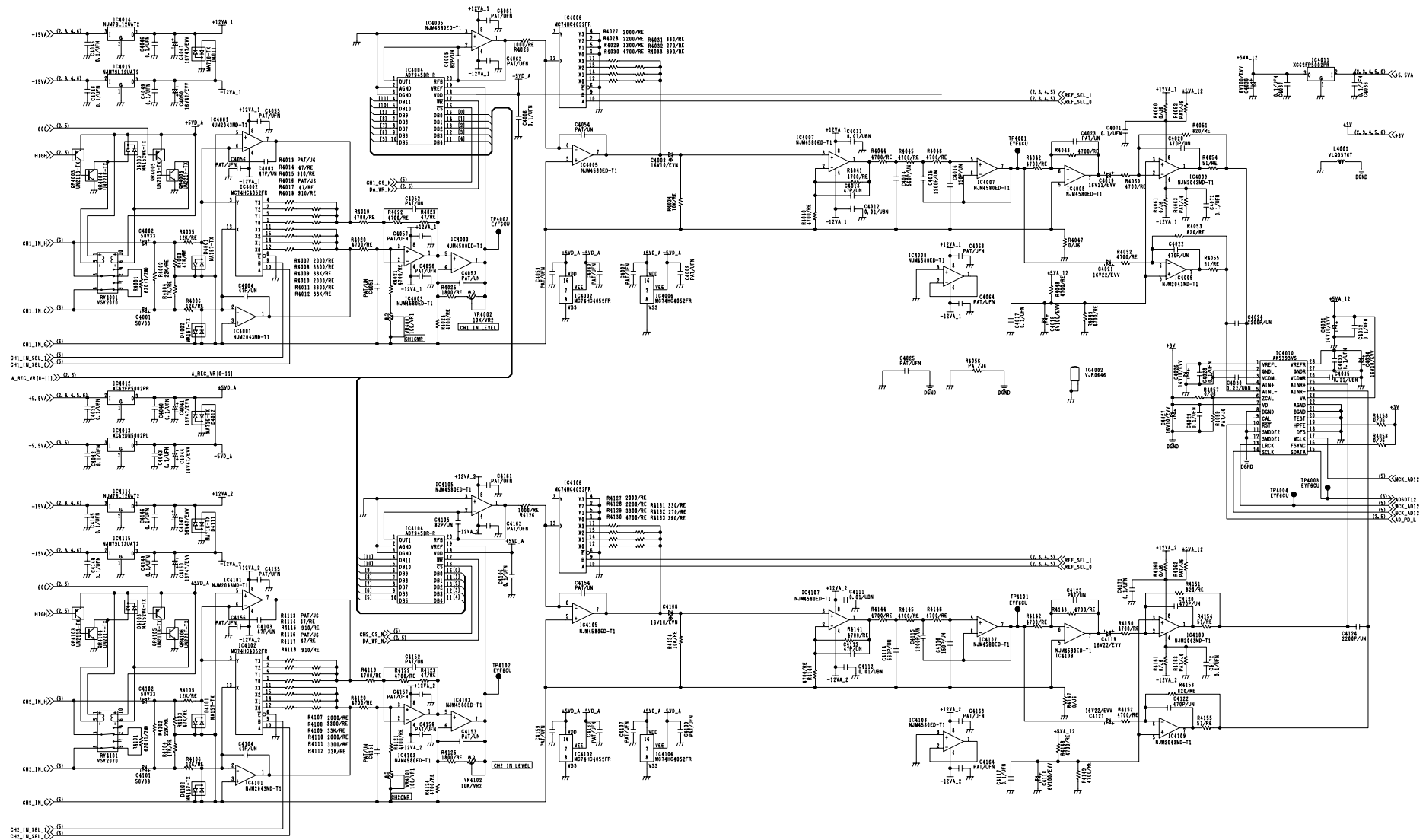
COMPONENT NAME	S2: CUE_TC	07/10
CIRCUIT BOARD NO.	VEP84351A	DRAWING NO.
		KR4J22 (7/10)
		SCM134



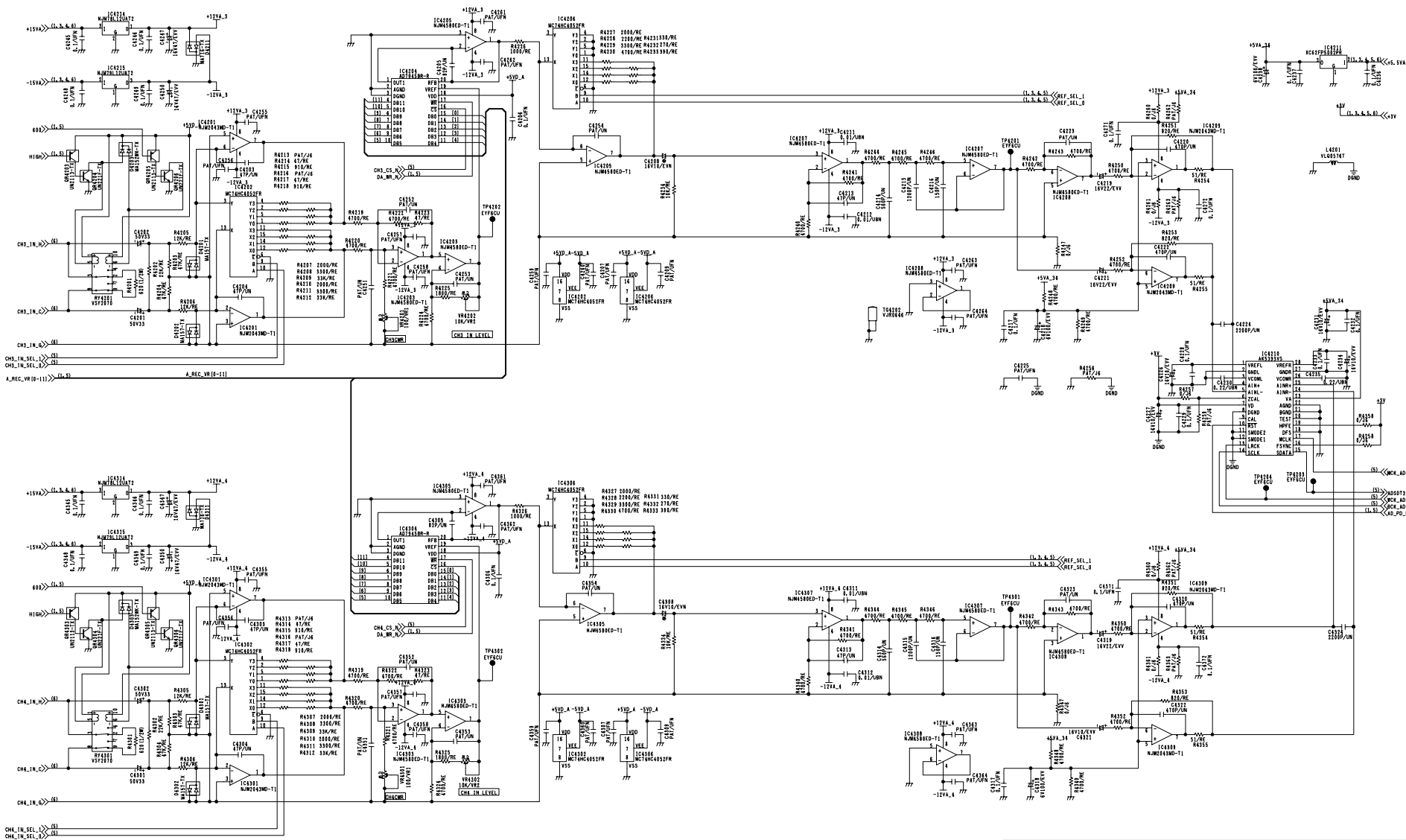
COMPONENT NAME	S2: CUE_TC	09/10
CIRCUIT BOARD NO.	VEP84351A	DRAWING NO.
		KR4J22 (9/10)
		SCM136



COMPONENT NAME	S2: CUE_TC	10/10
CIRCUIT BOARD NO.	VEP84351A	DRAWING NO.
		KR4J22 (10/10)
		SCM137

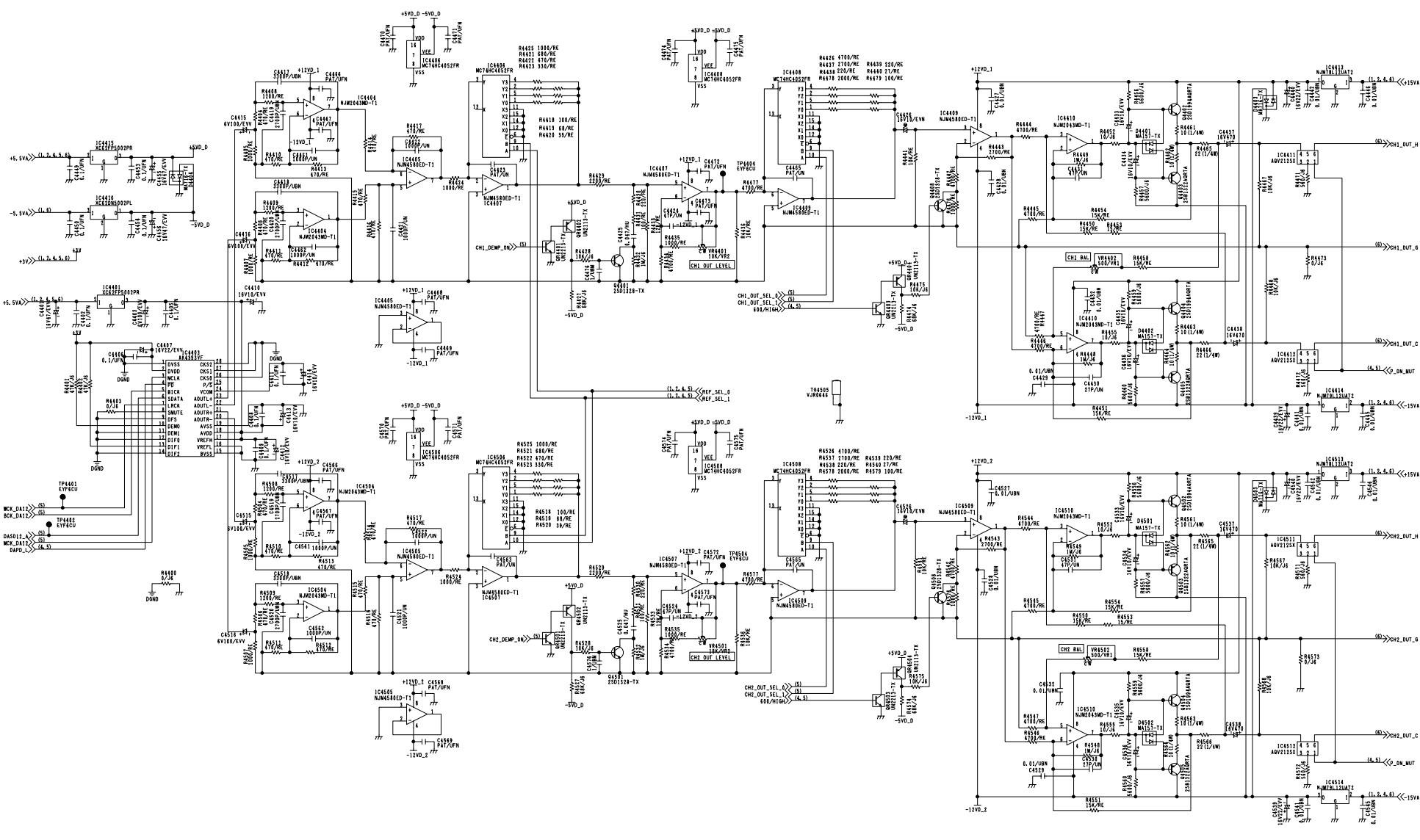


COMPONENT NAME	S3: A_AD/DA		01/06
CIRCUIT BOARD NO.		DRAWING NO.	
VEP84352A		KR4J23 (01/06)	
		SCM138	



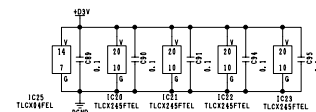
COMPONENT NAME	S3:A_AD/DA		02/06
CIRCUIT BOARD NO.		DRAWING NO.	
VEP84352A		KR4J23 (02/06)	
		SCM139	

A
B
C
D
E
F
G
H
I
J

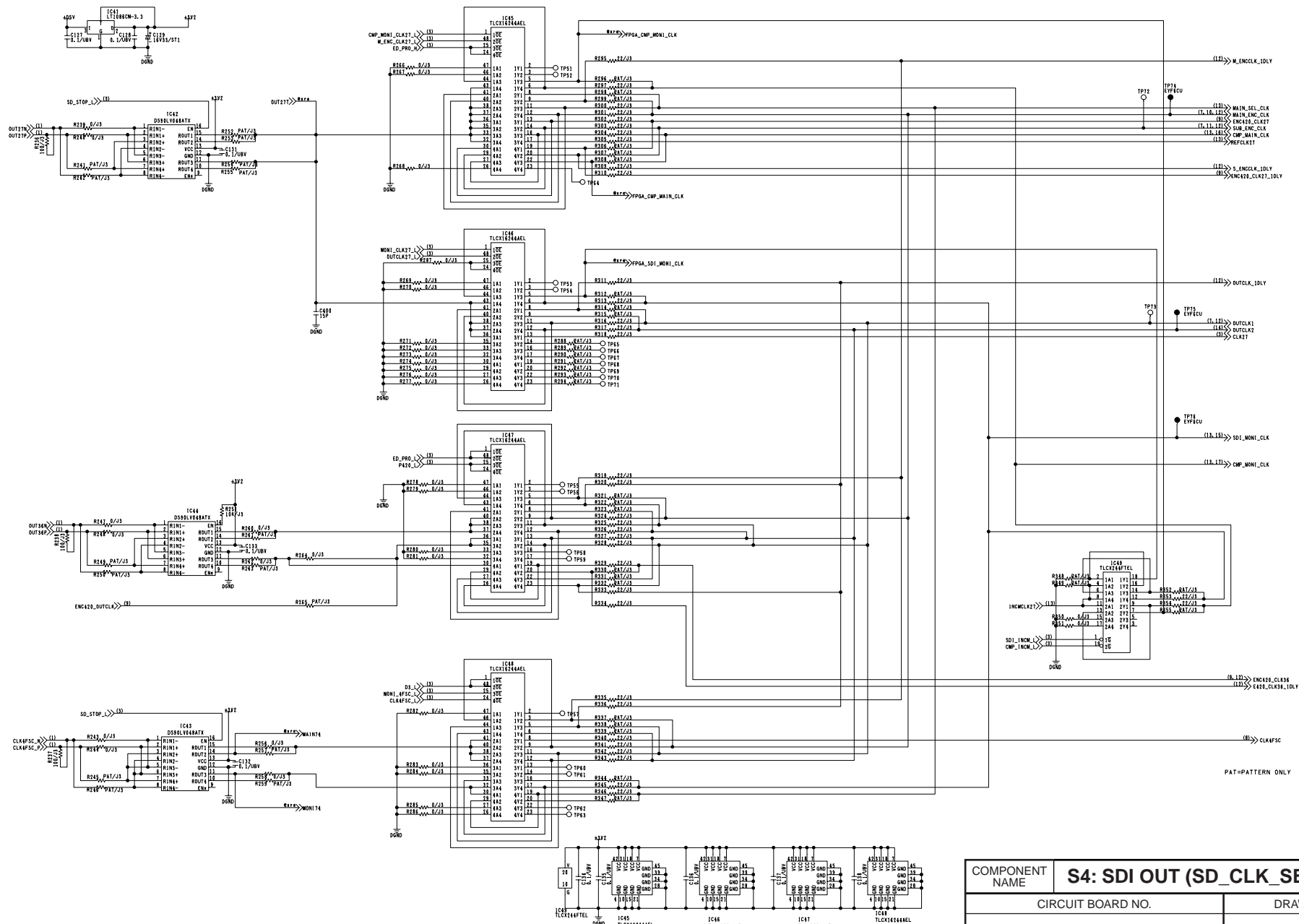


COMPONENT NAME	S3: A_AD/DA	03/06
CIRCUIT BOARD NO.	VEP84352A	DRAWING NO.
		KR4J23 (03/06)
		SCM140

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



COMPONENT NAME	S4: SDI OUT (SYS_IF)	03/17
CIRCUIT BOARD NO.		DRAWING NO.
VEP83506A		KR30176 (03/17)
		SCM146



A

B

C

D

E

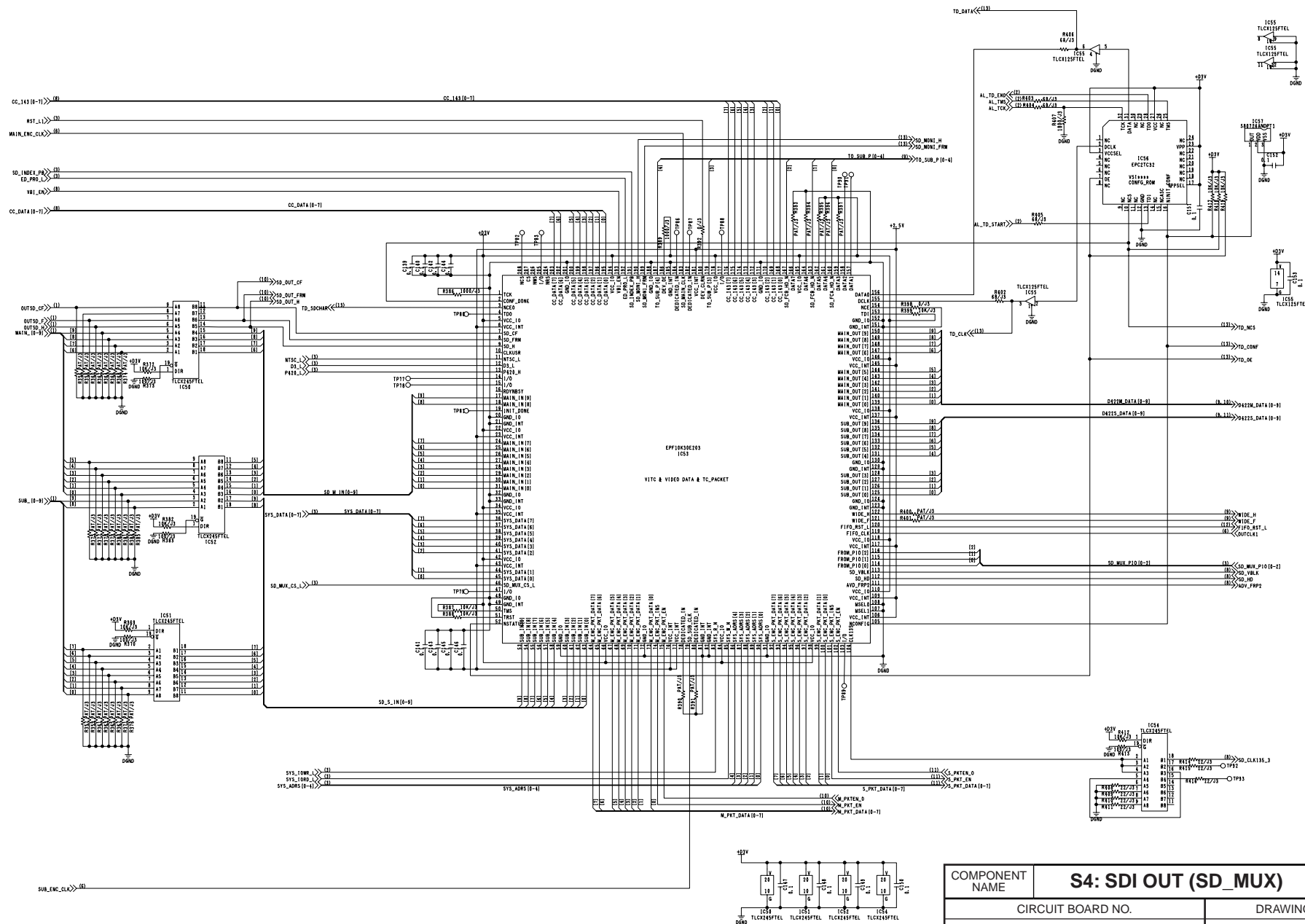
F

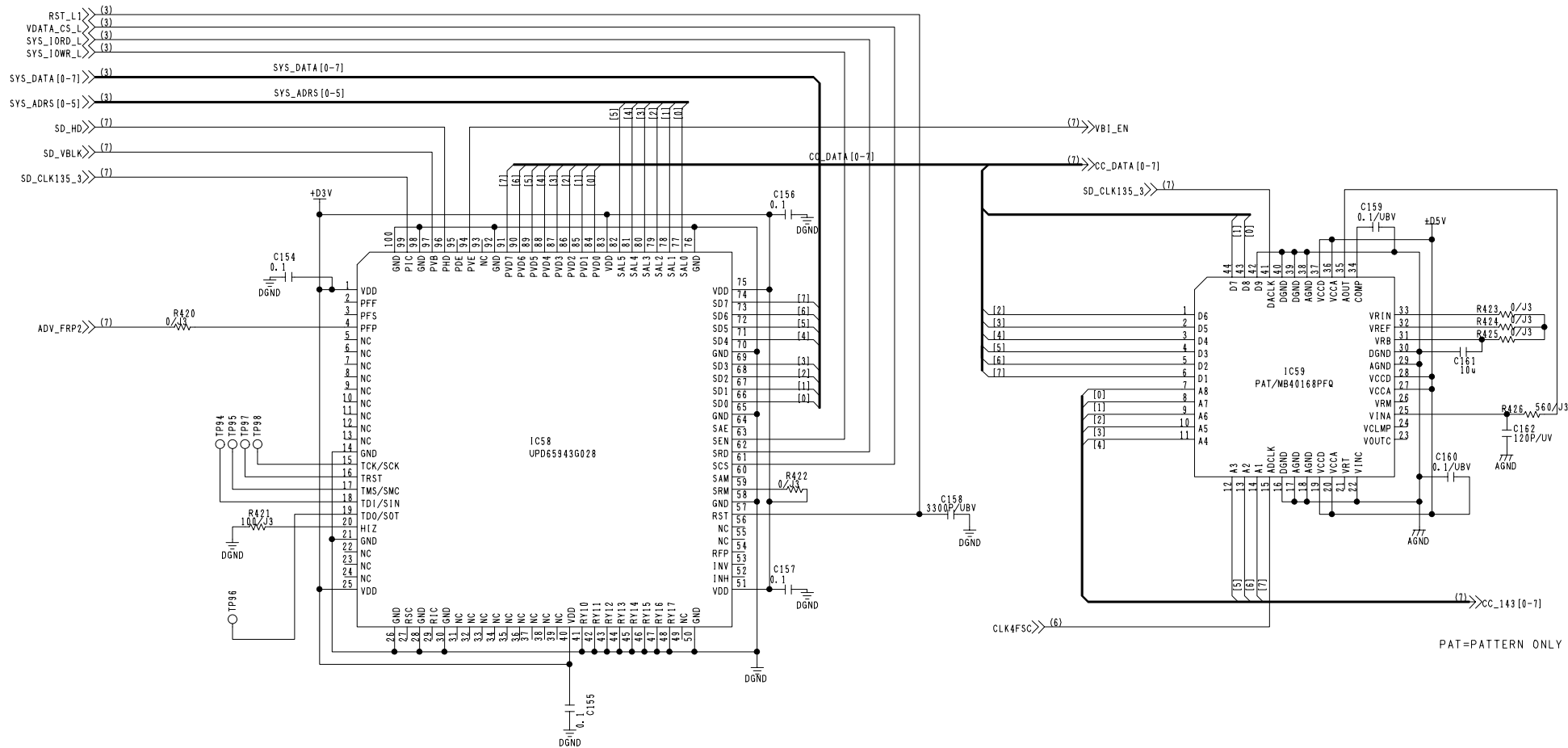
G

H

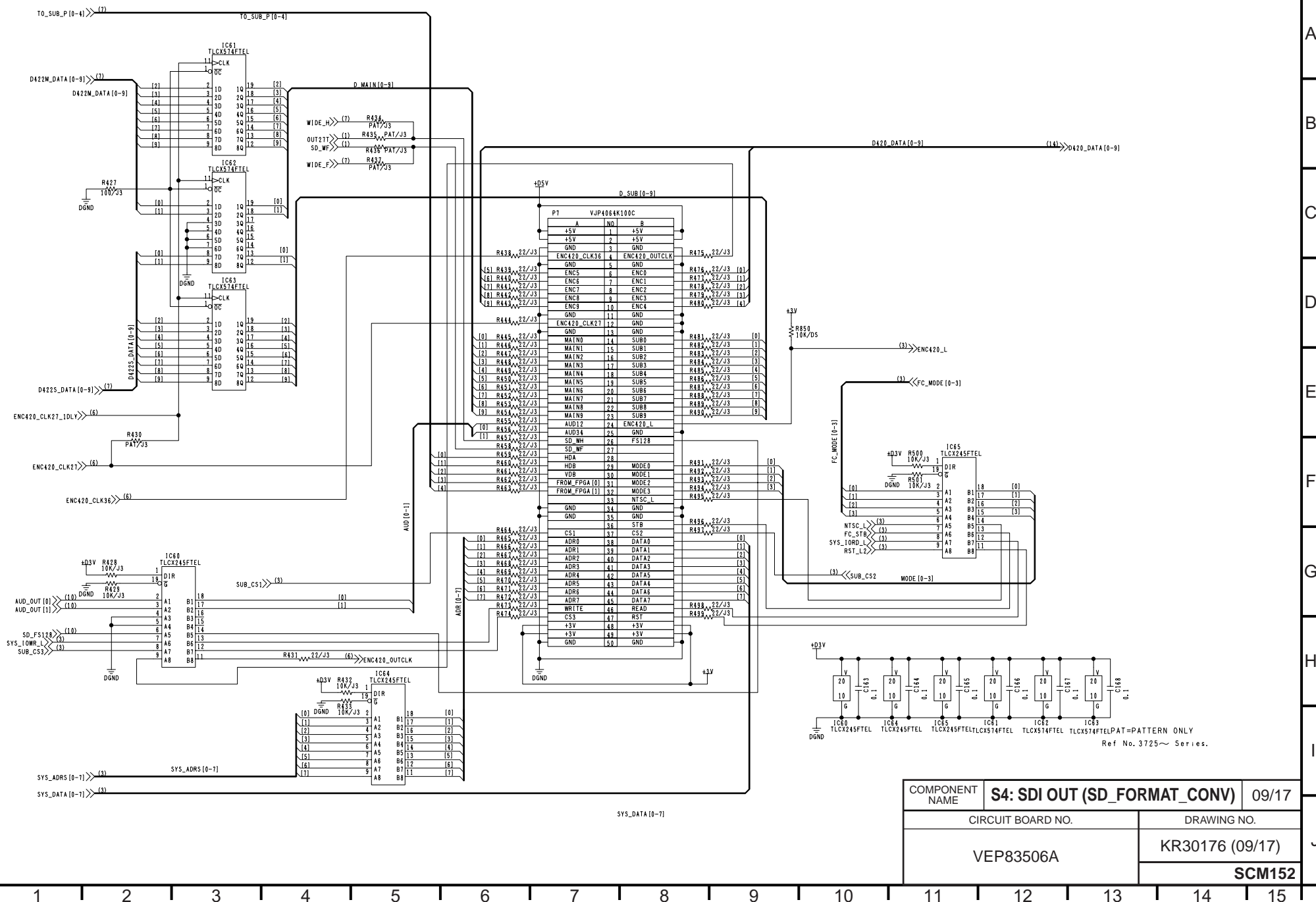
I

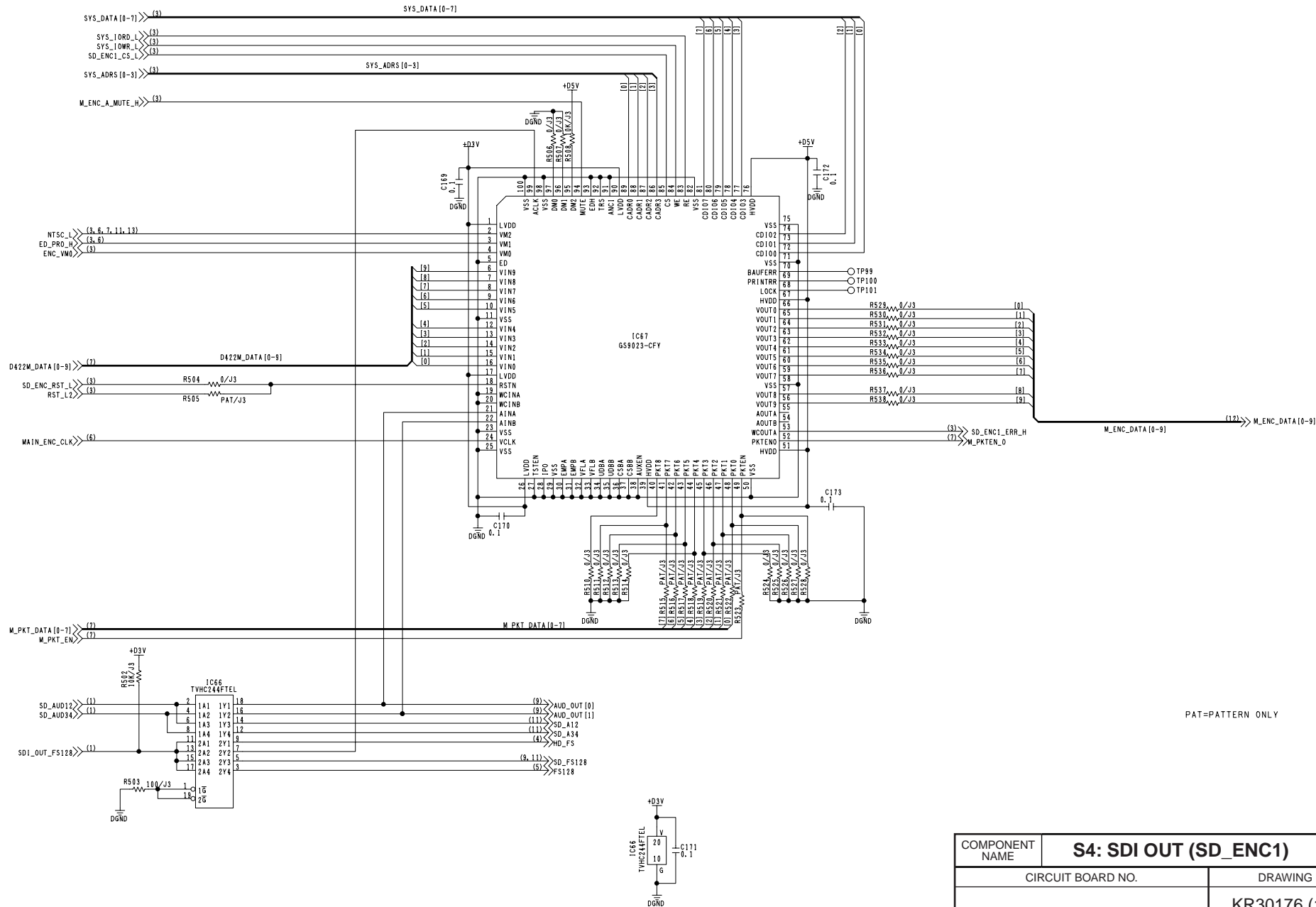
J





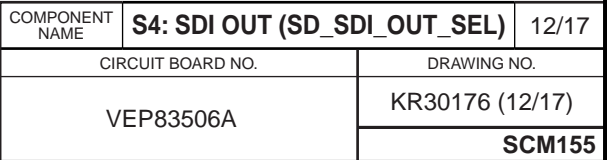
COMPONENT NAME	S4: SDI OUT (VIDEO_DATA)	08/17
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83506A	KR30176 (08/17)	
	SCM151	

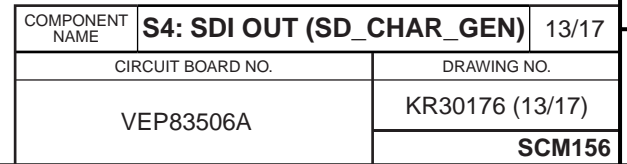


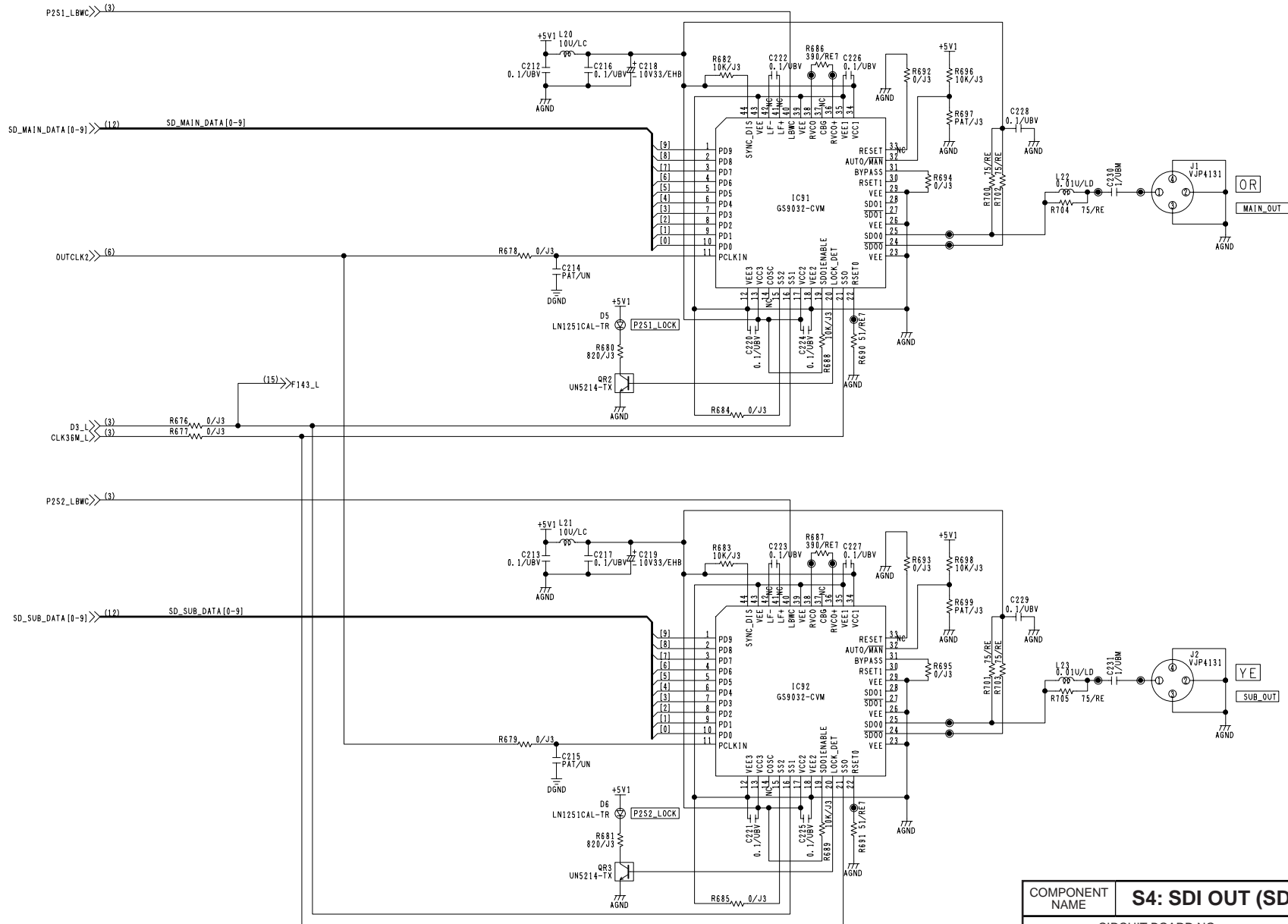


PAT=PATTERN ONLY

COMPONENT NAME	S4: SDI OUT (SD_ENC1)	10/17
CIRCUIT BOARD NO.		DRAWING NO.
VEP83506A		KR30176 (10/17)
		SCM153

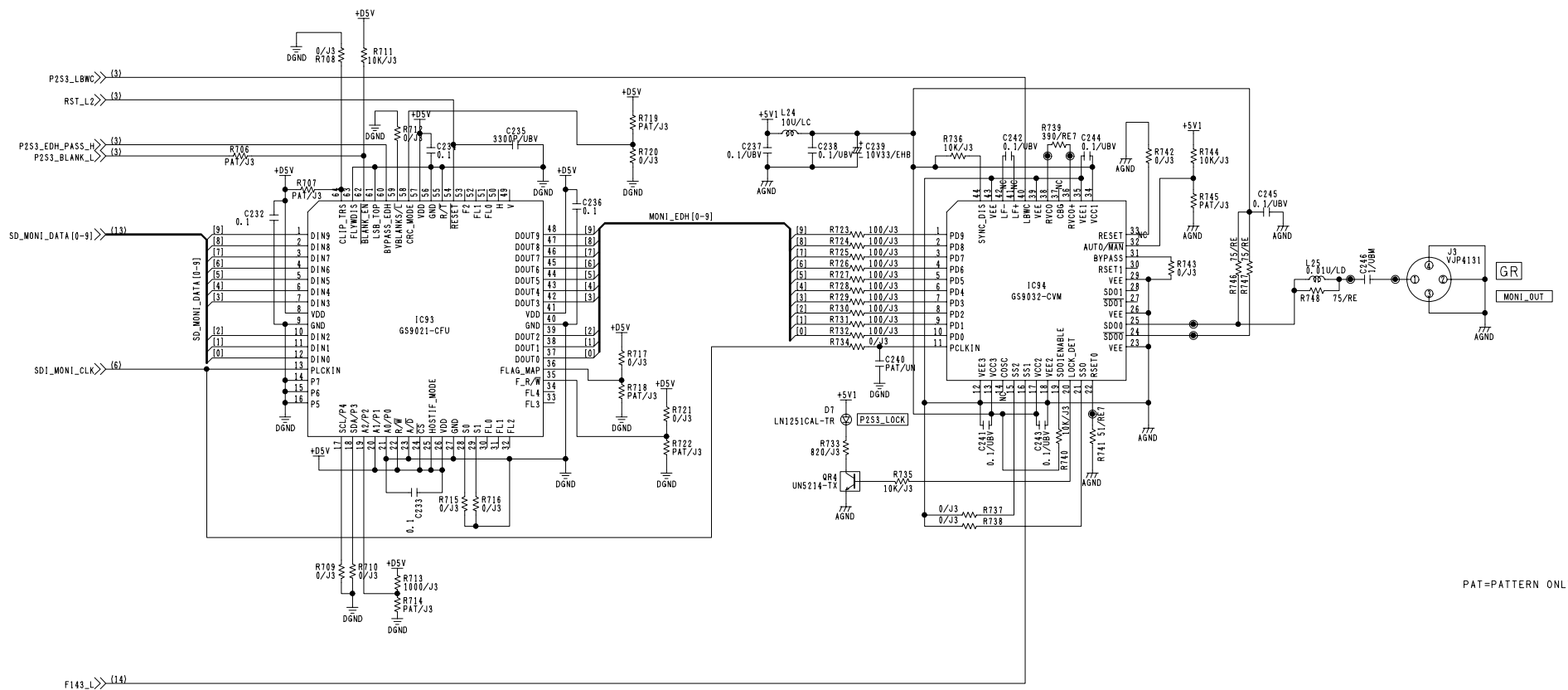






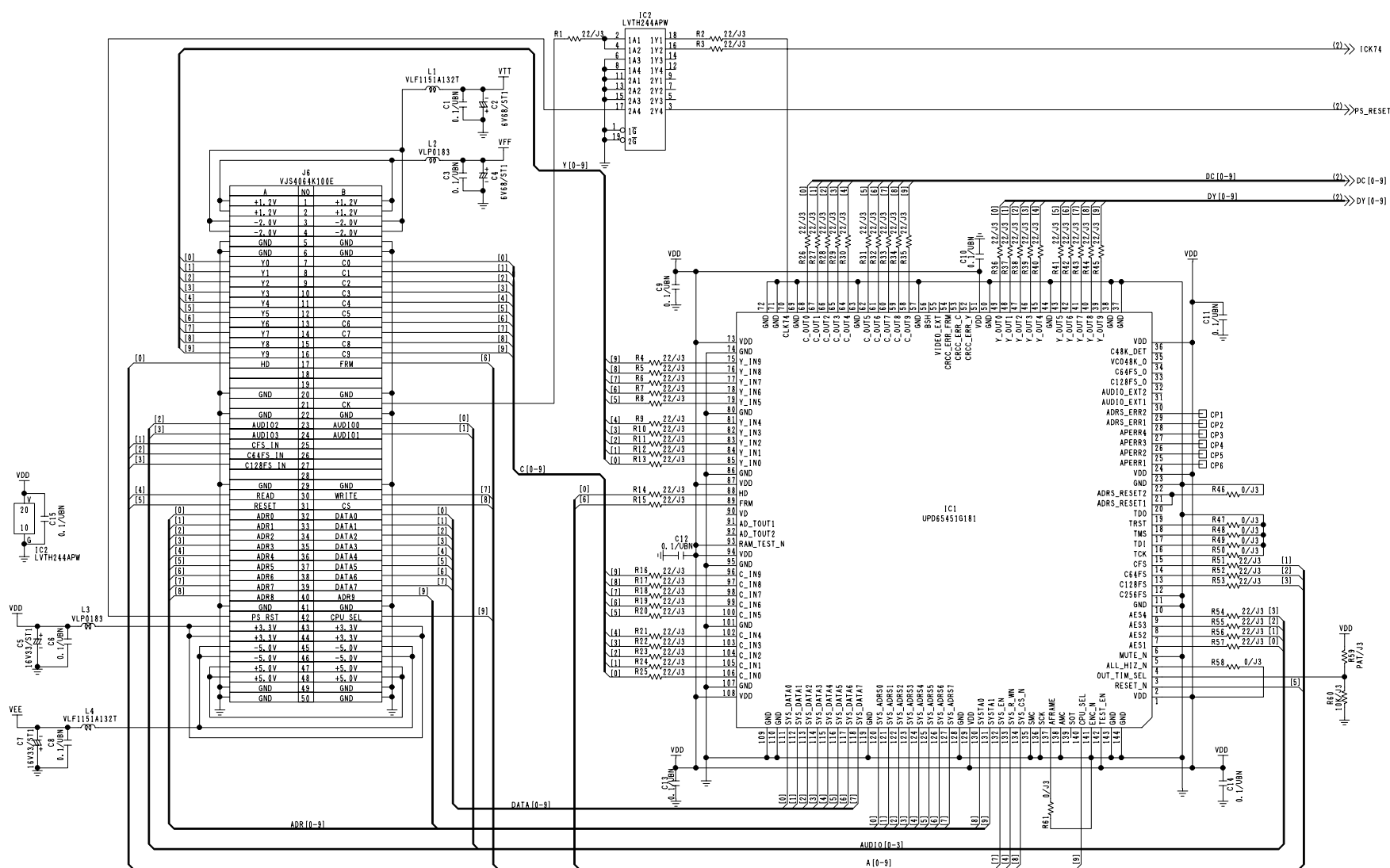
PAT=PATTERN ONLY

COMPONENT NAME	S4: SDI OUT (SD_SDI_OUT)	14/17
CIRCUIT BOARD NO.		DRAWING NO.
VEP83506A		KR30176 (14/17)
		SCM157



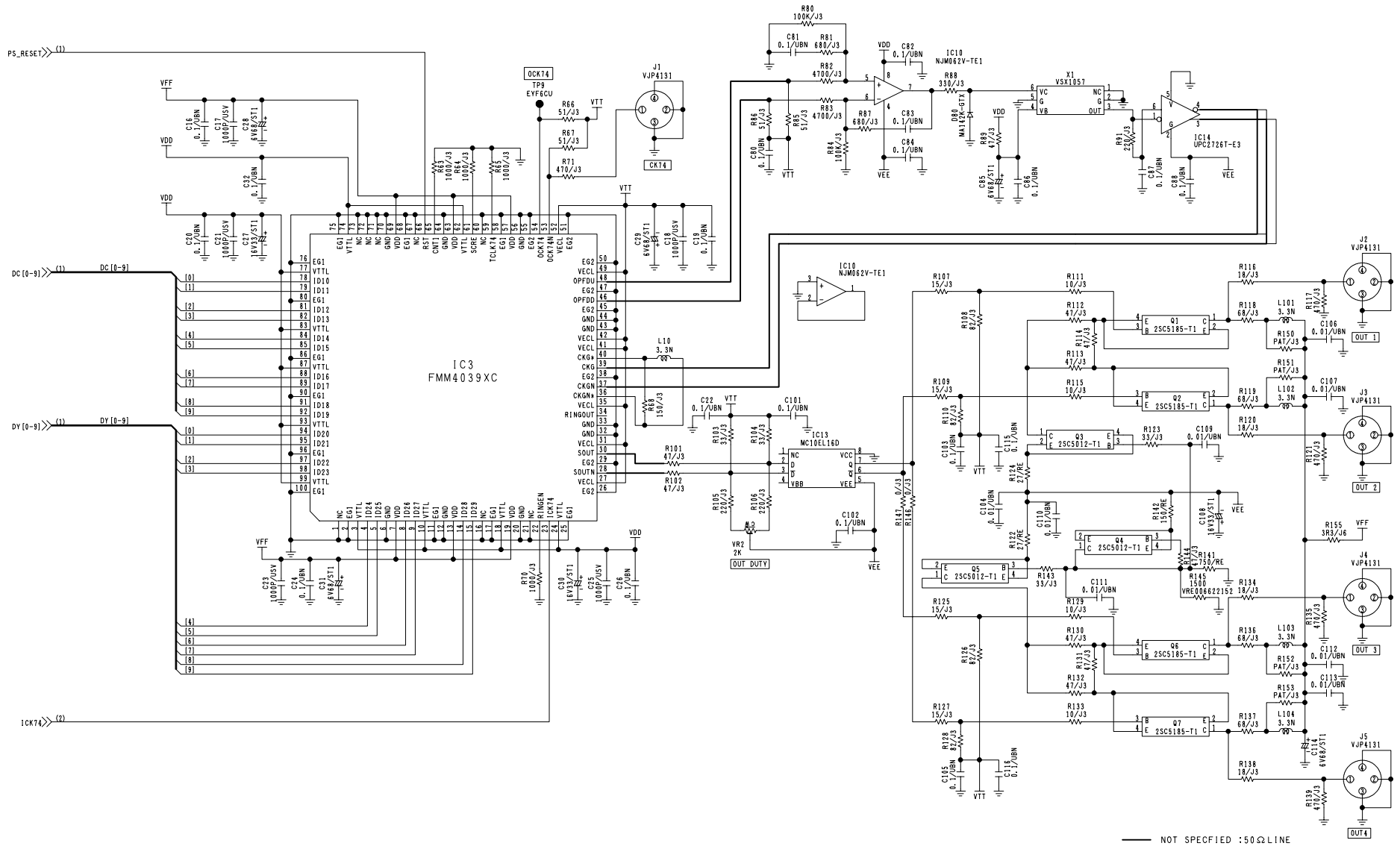
PAT=PATTERN ONLY

COMPONENT NAME	S4: SDI OUT (SD_SDI_MONI_OUT)	15/17
CIRCUIT BOARD NO.		DRAWING NO.
VEP83506A		KR30176 (15/17)
		SCM158

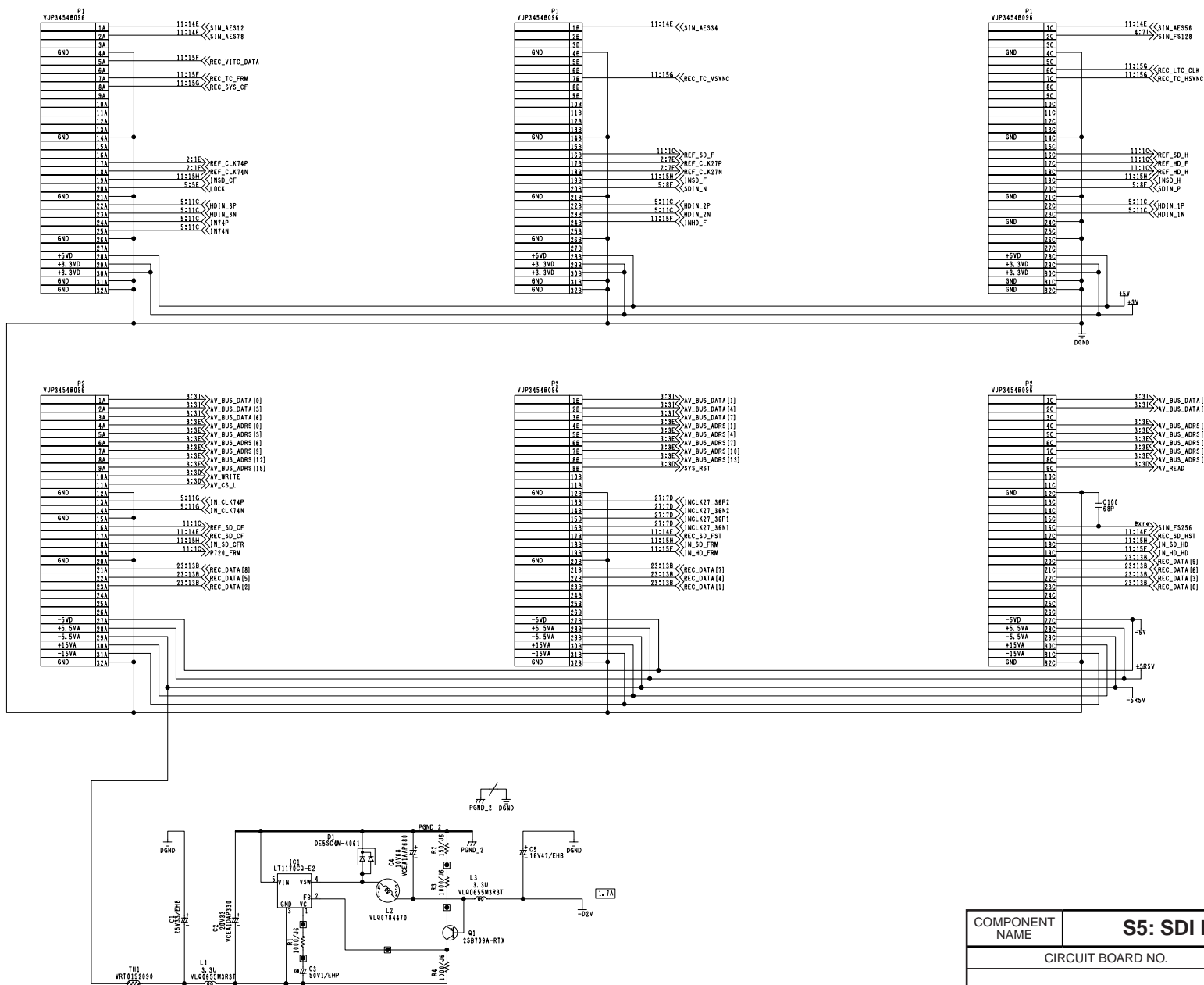


NOT SPECIFIED :50Ω LINE
 PAT=PATTERN ONLY
 Ref No.**** Series.

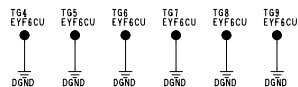
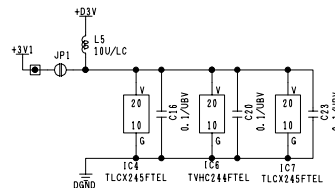
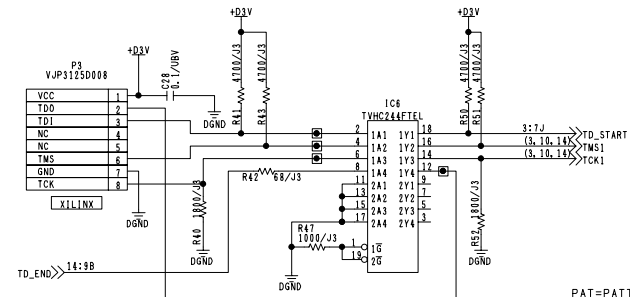
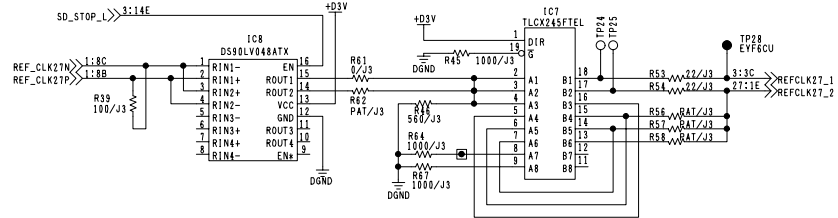
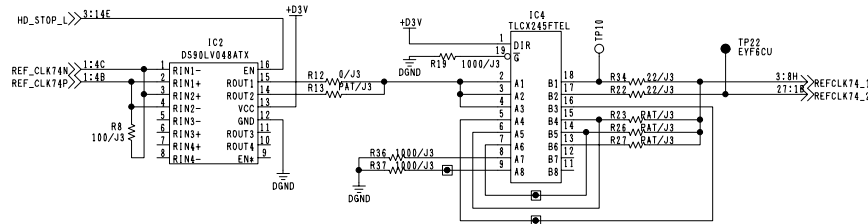
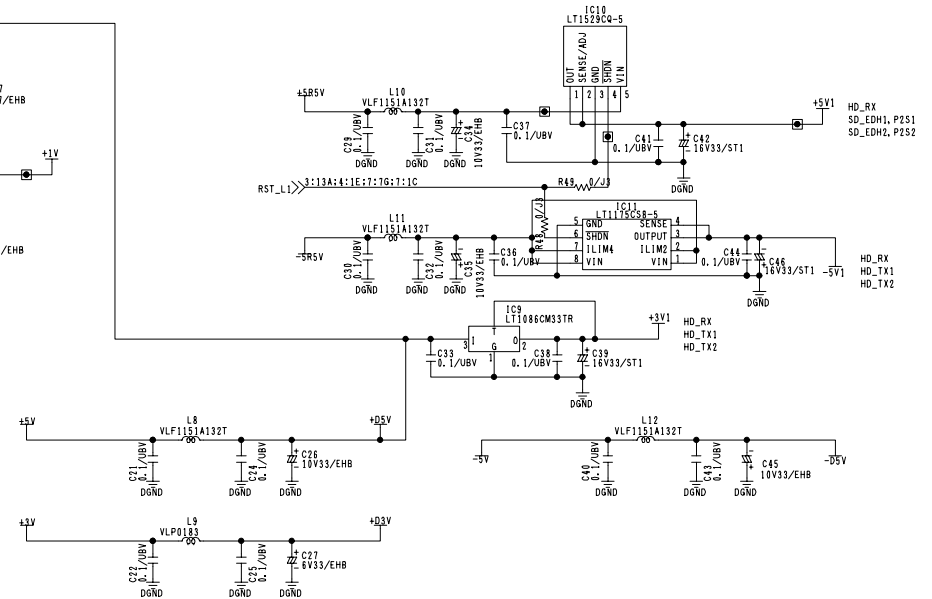
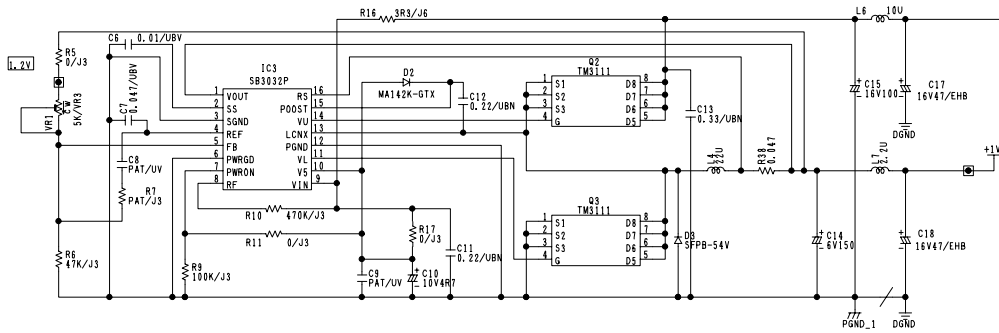
COMPONENT NAME		S4:HD SDI TX		01/02
CIRCUIT BOARD NO.		DRAWING NO.		
VEP83460B		KR3X20 (1/2)		
		SCM161		



COMPONENT NAME	S4:HD SDI TX	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP83460B		KR3X20 (2/2)
		SCM162

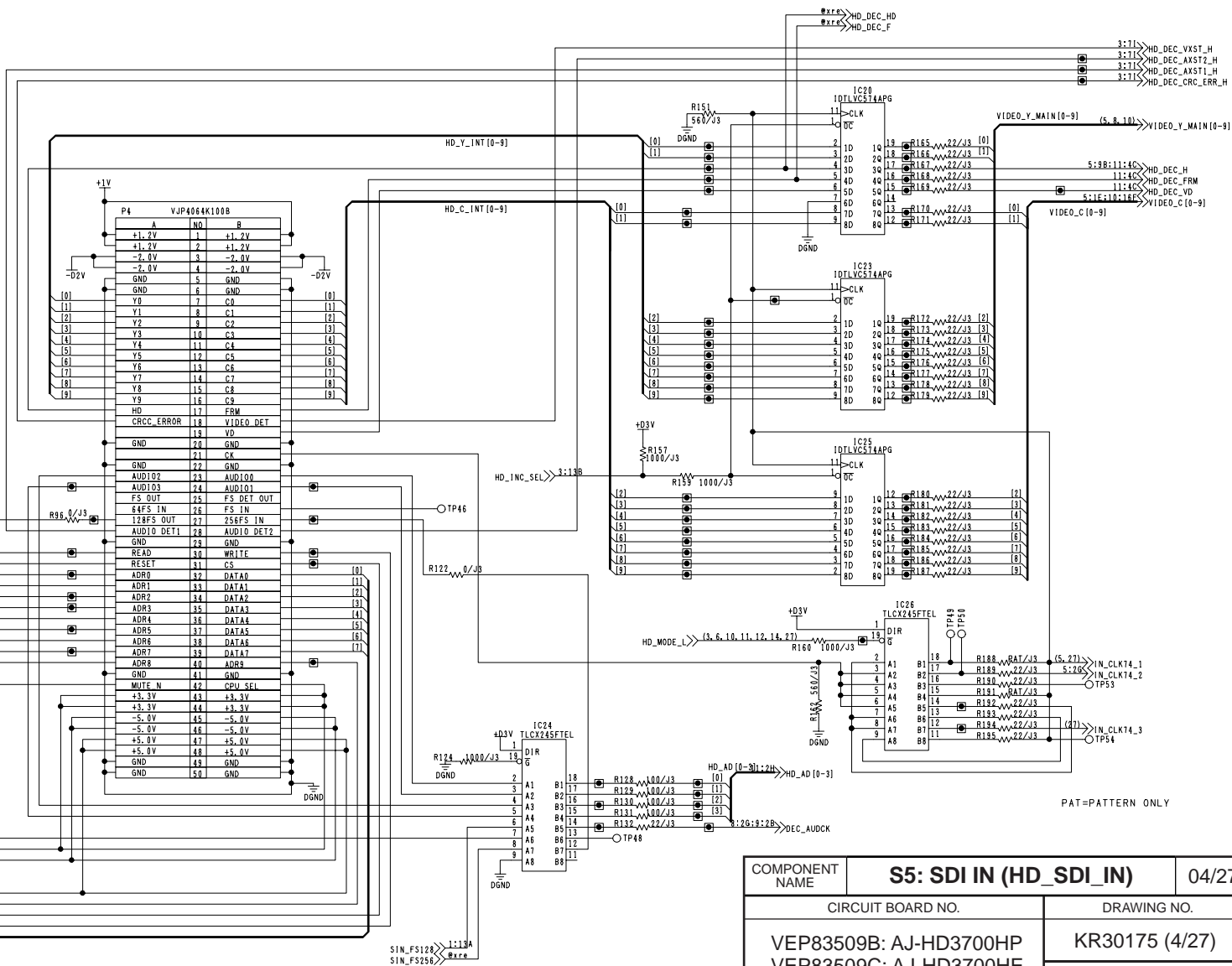
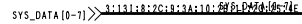
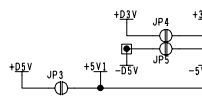
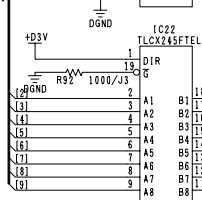
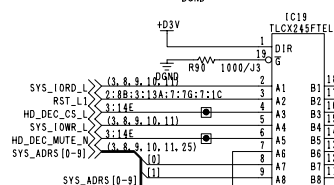
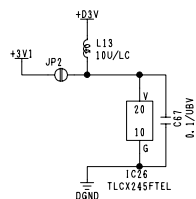
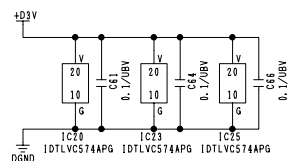
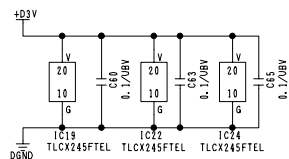


COMPONENT NAME	S5: SDI IN (SDI_IN)	01/27
CIRCUIT BOARD NO.	VEP83509B: AJ-HD3700HP	DRAWING NO.
	VEP83509C: AJ-HD3700HE	KR30175 (1/27)
		SCM163

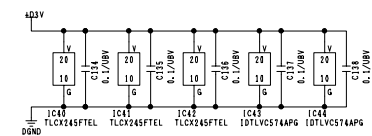
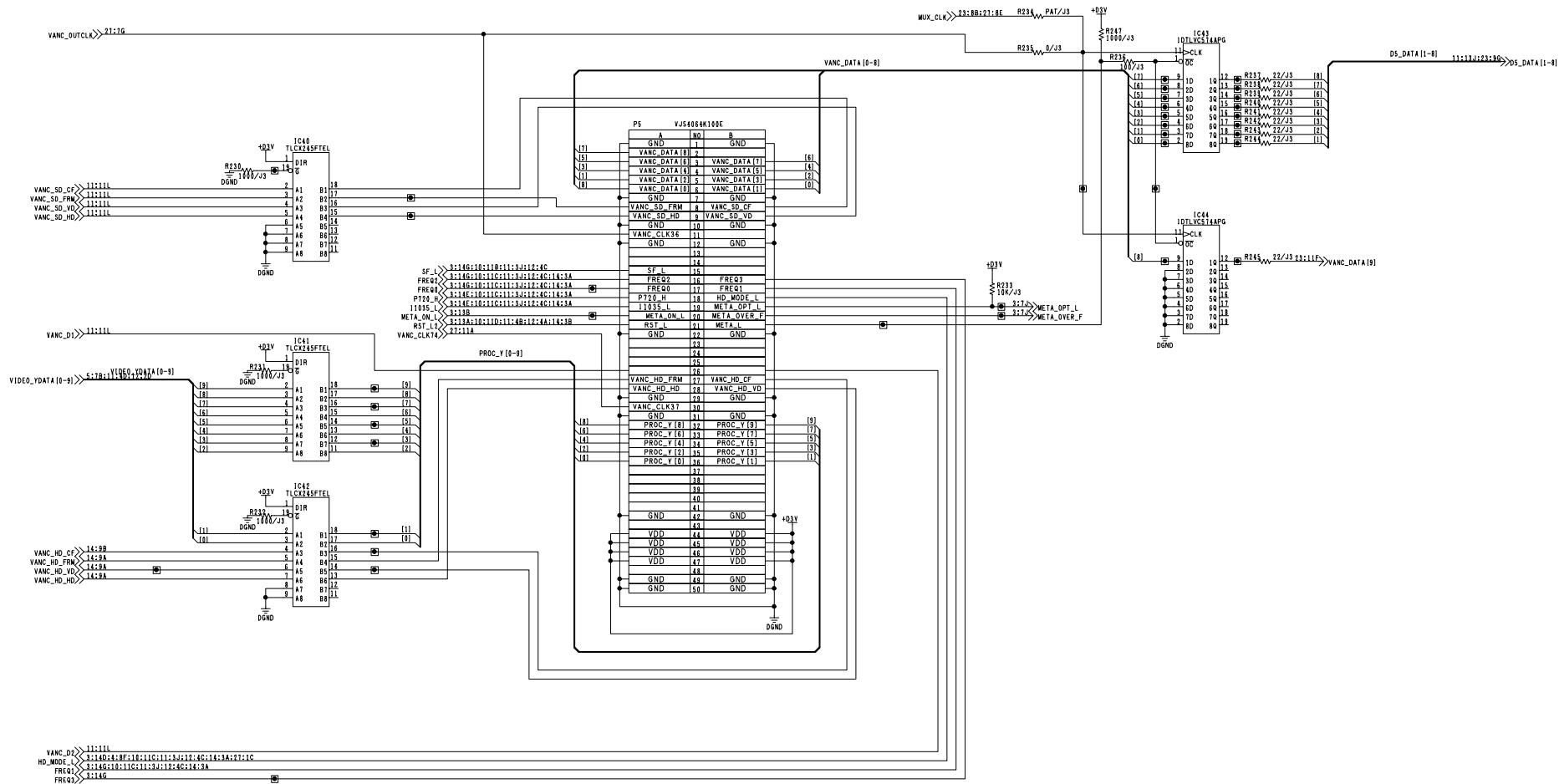


COMPONENT NAME	S5: SDI IN (POWER)	02/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP		KR30175 (2/27)
VEP83509C: AJ-HD3700HE		
		SCM164

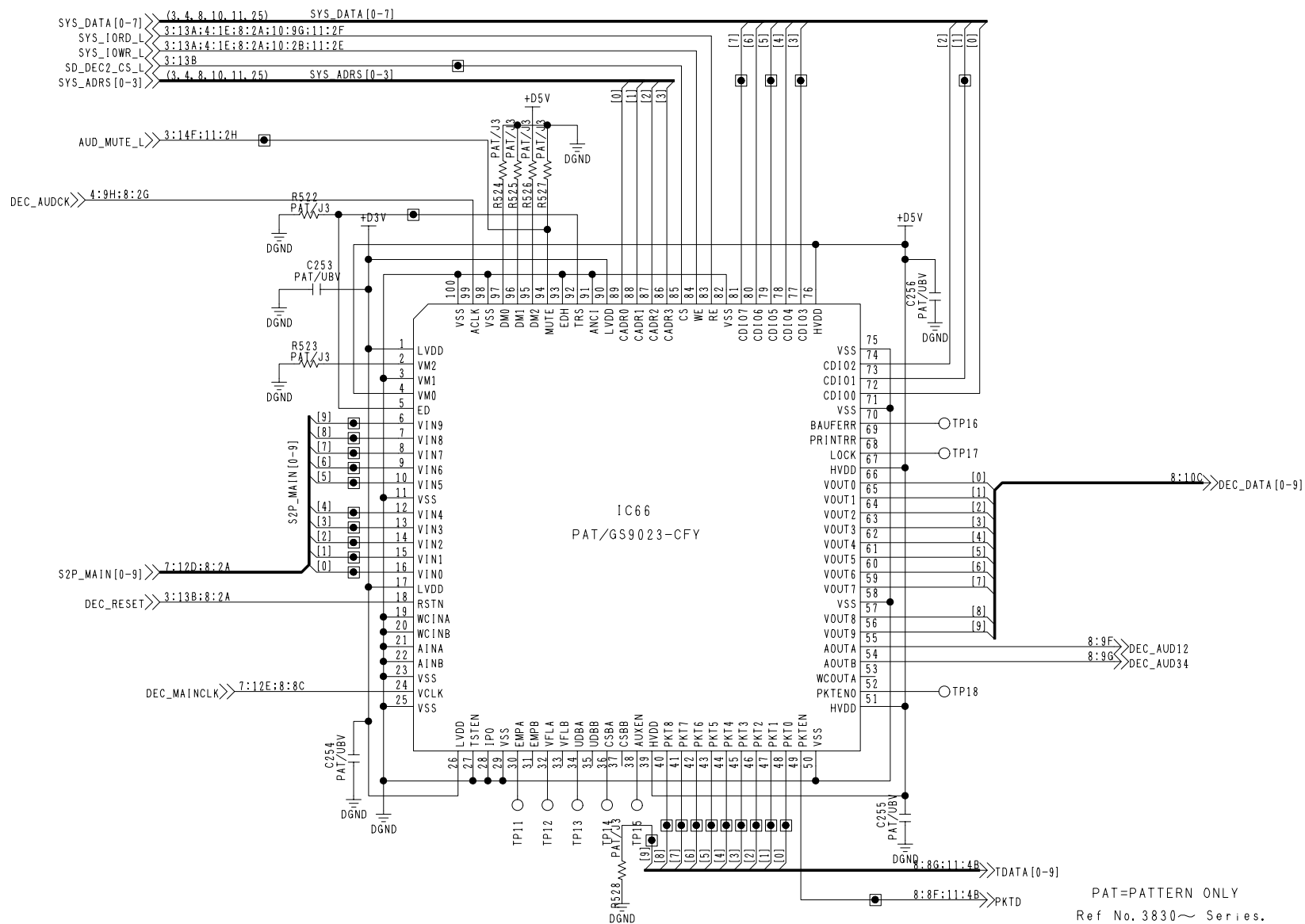
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



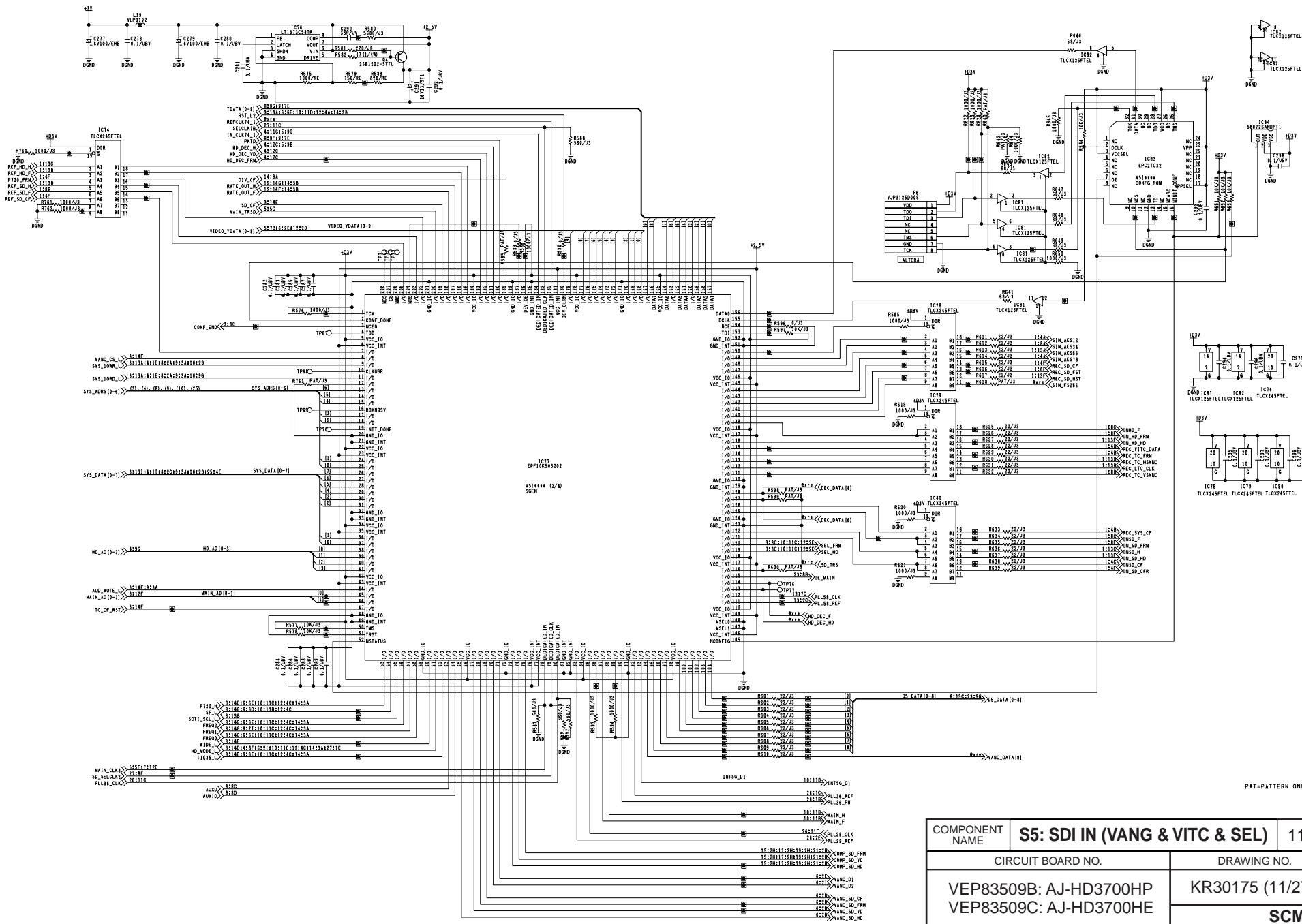
COMPONENT NAME	S5: SDI IN (HD_SDI_IN)	04/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP VEP83509C: AJ-HD3700HE		KR30175 (4/27)
		SCM166



COMPONENT NAME	S5: SDI IN (META_DATA)	06/27
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83509B: AJ-HD3700HP	KR30175 (6/27)	
VEP83509C: AJ-HD3700HE	SCM168	



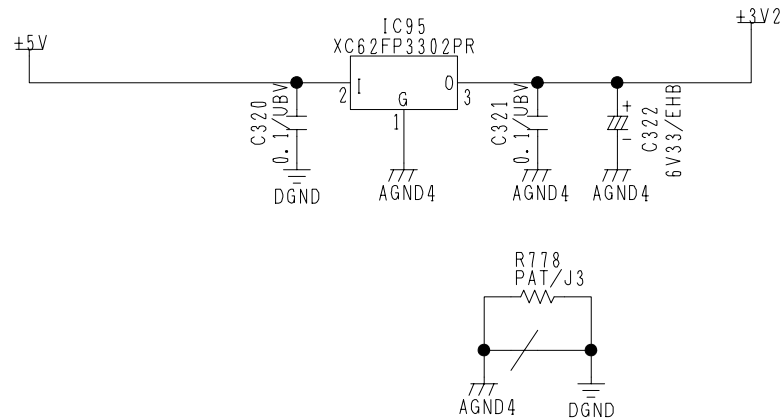
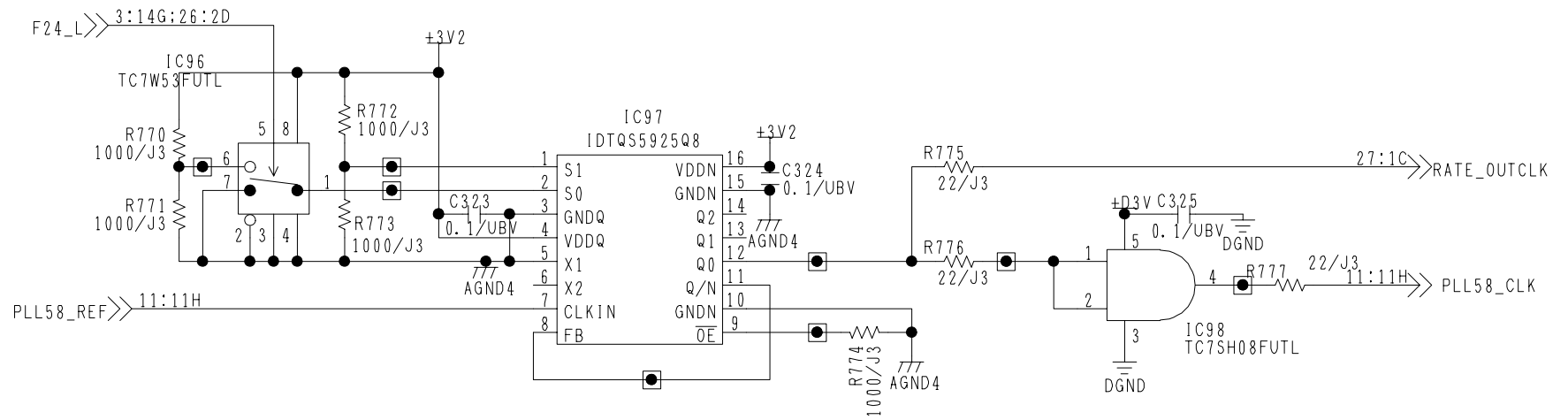
COMPONENT NAME	S5: SDI IN (SD_DEC2)	09/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP VEP83509C: AJ-HD3700HE		KR30175 (9/27)
		SCM171



COMPONENT NAME	S5: SDI IN (VANG & VITC & SEL)	11/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP		KR30175 (11/27)
VEP83509C: AJ-HD3700HE		
		SCM173

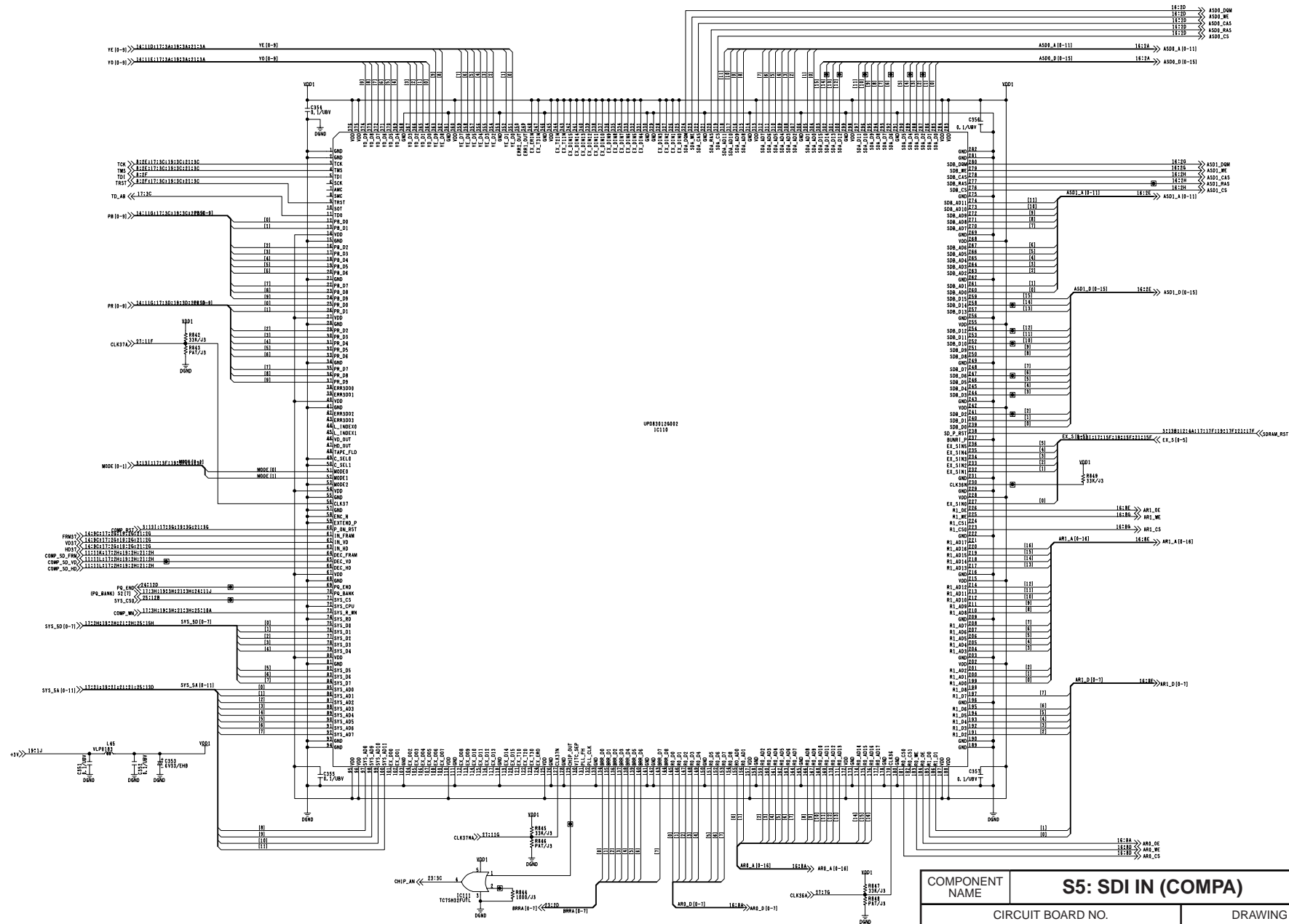


COMPONENT NAME	S5: SDI IN (RATE_CON)	12/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP		KR30175 (12/27)
VEP83509C: AJ-HD3700HE		
		SCM174

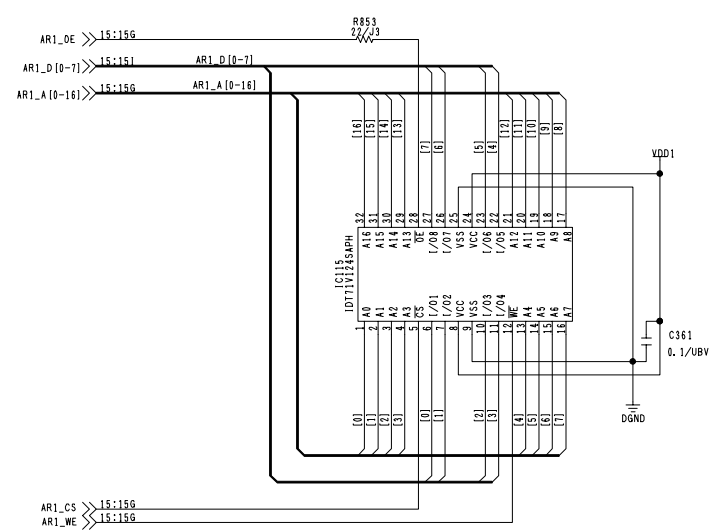
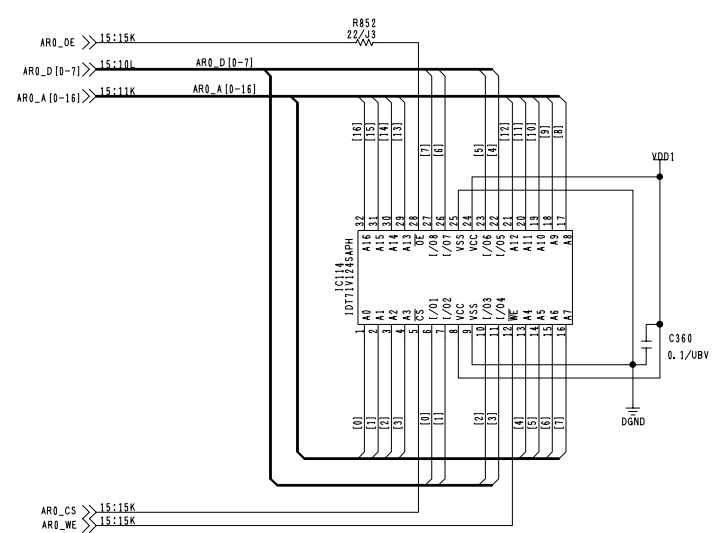
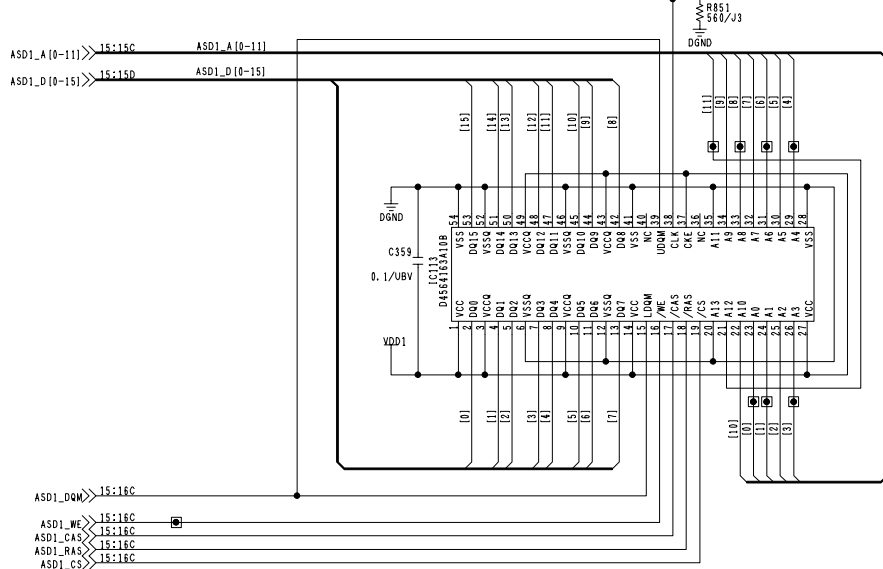
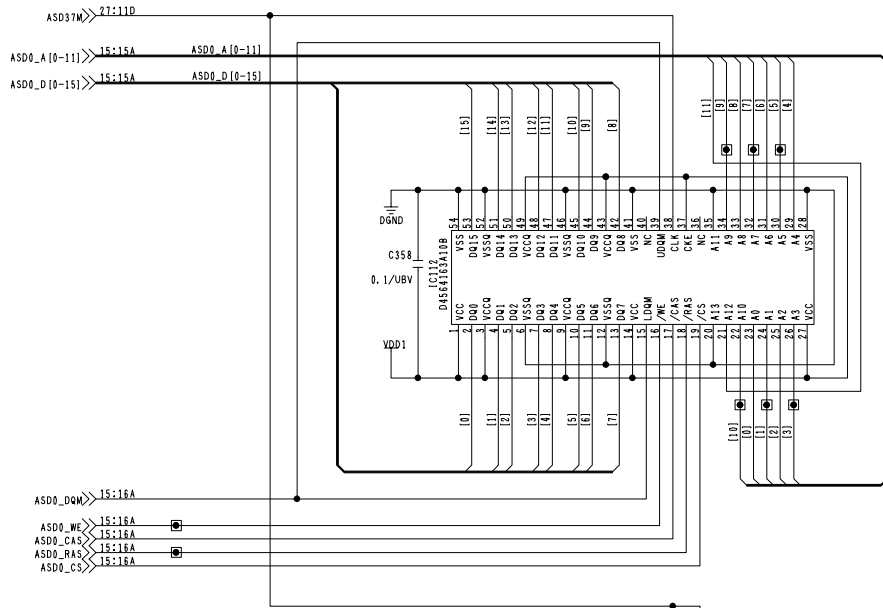


PAT=PATTERN ONLY

COMPONENT NAME	S5: SDI IN (RATE_CON_CLK)	13/27
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83509B: AJ-HD3700HP	KR30175 (13/27)	
VEP83509C: AJ-HD3700HE	SCM175	



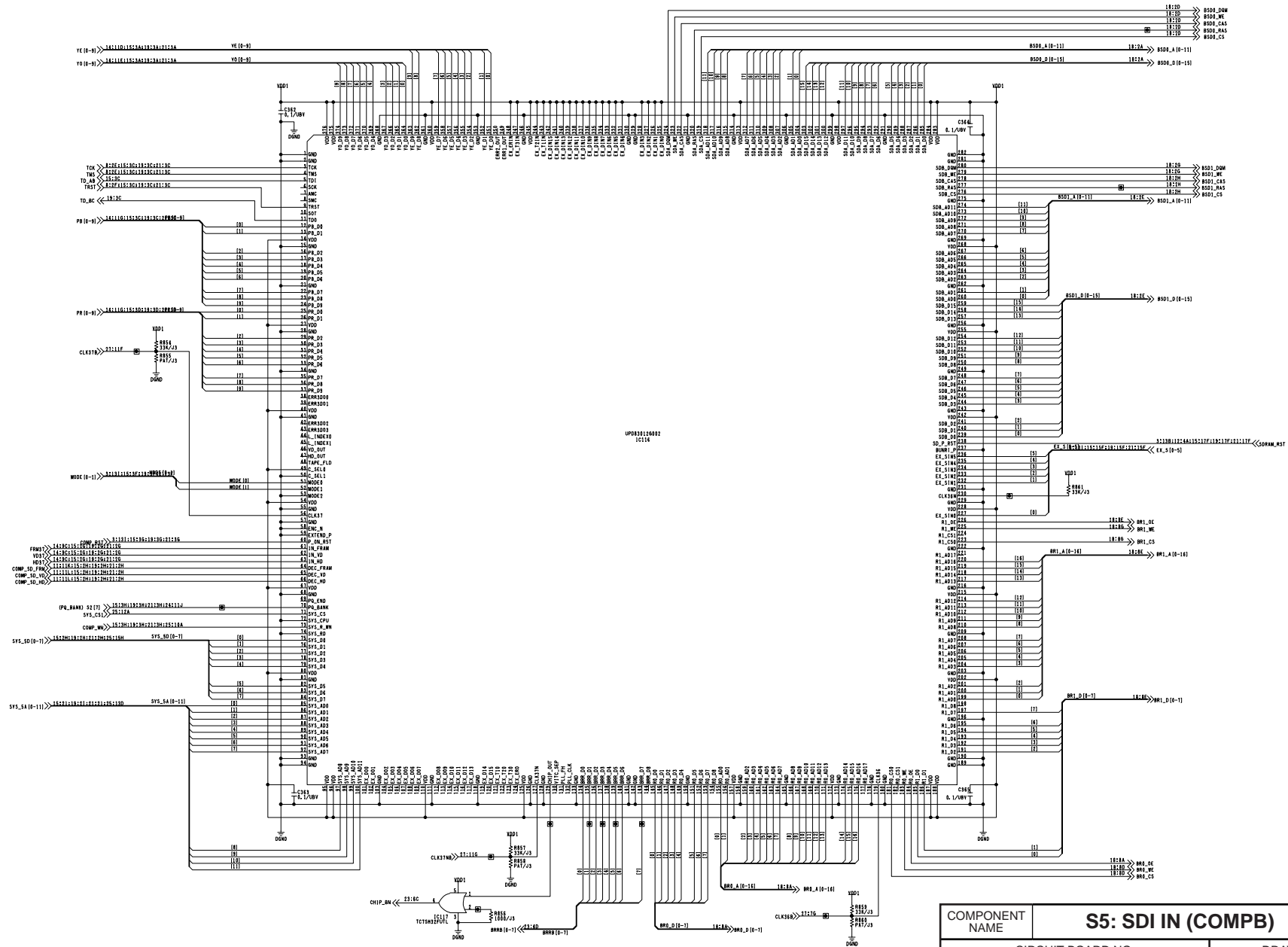
COMPONENT NAME		S5: SDI IN (COMPA)	15/27
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83509B: AJ-HD3700HP		KR30175 (15/27)	
VEP83509C: AJ-HD3700HE		SCM177	



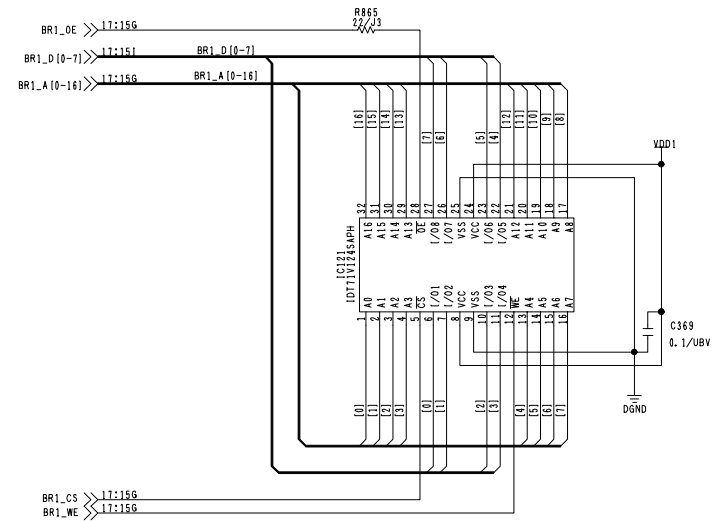
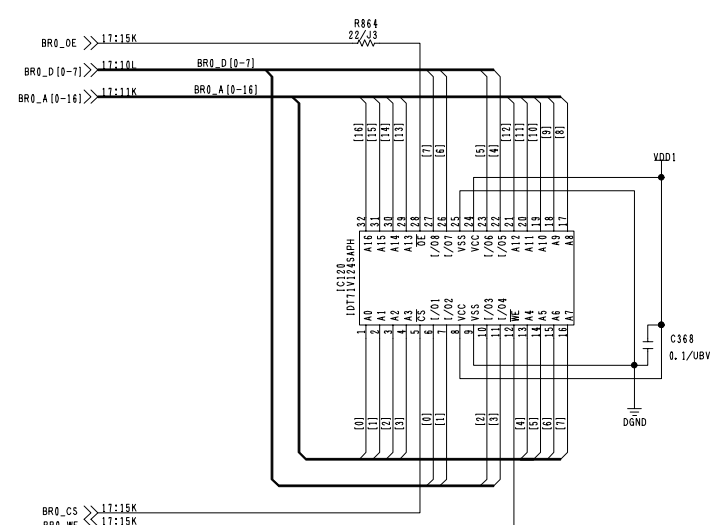
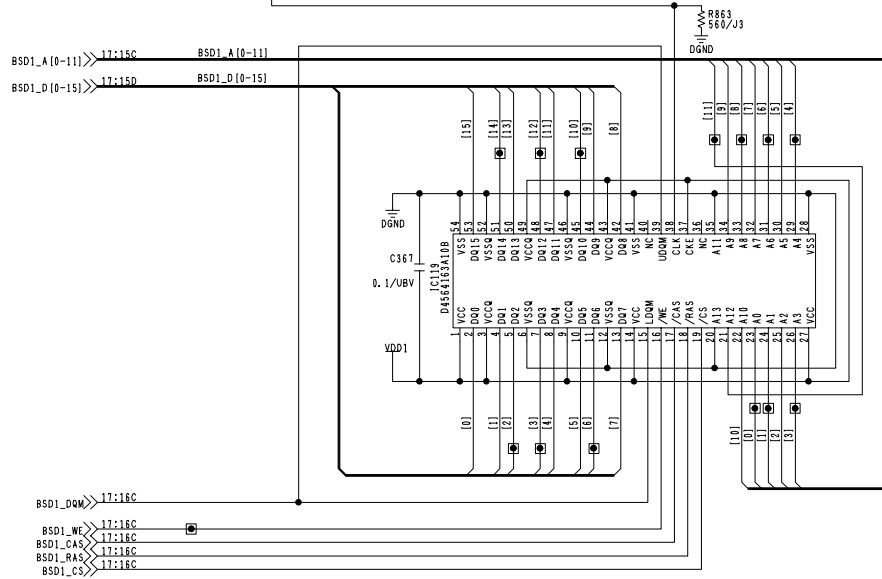
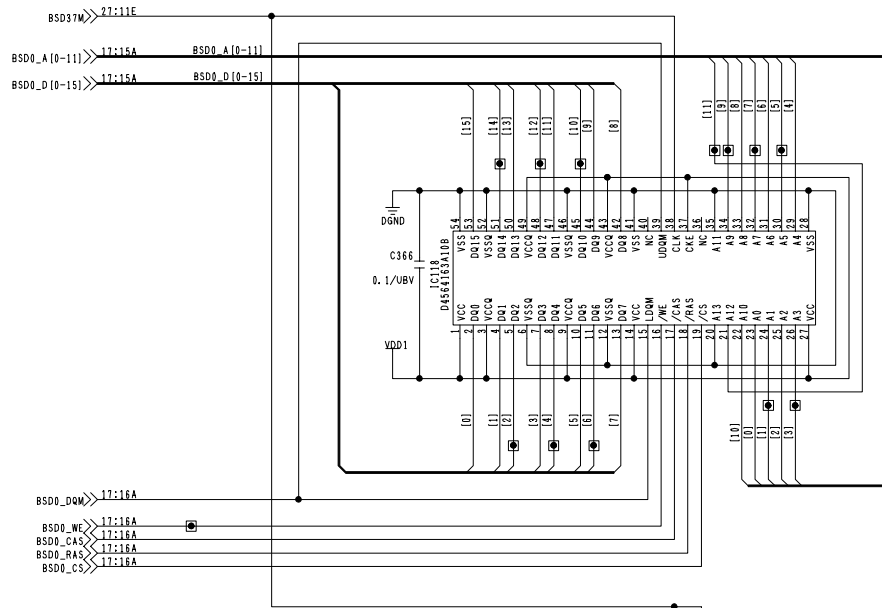
COMPONENT NAME	S5: SDI IN (MEMORYA)	16/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP		KR30175 (16/27)
VEP83509C: AJ-HD3700HE		
		SCM178

A
B
C
D
E
F
G
H
I
J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



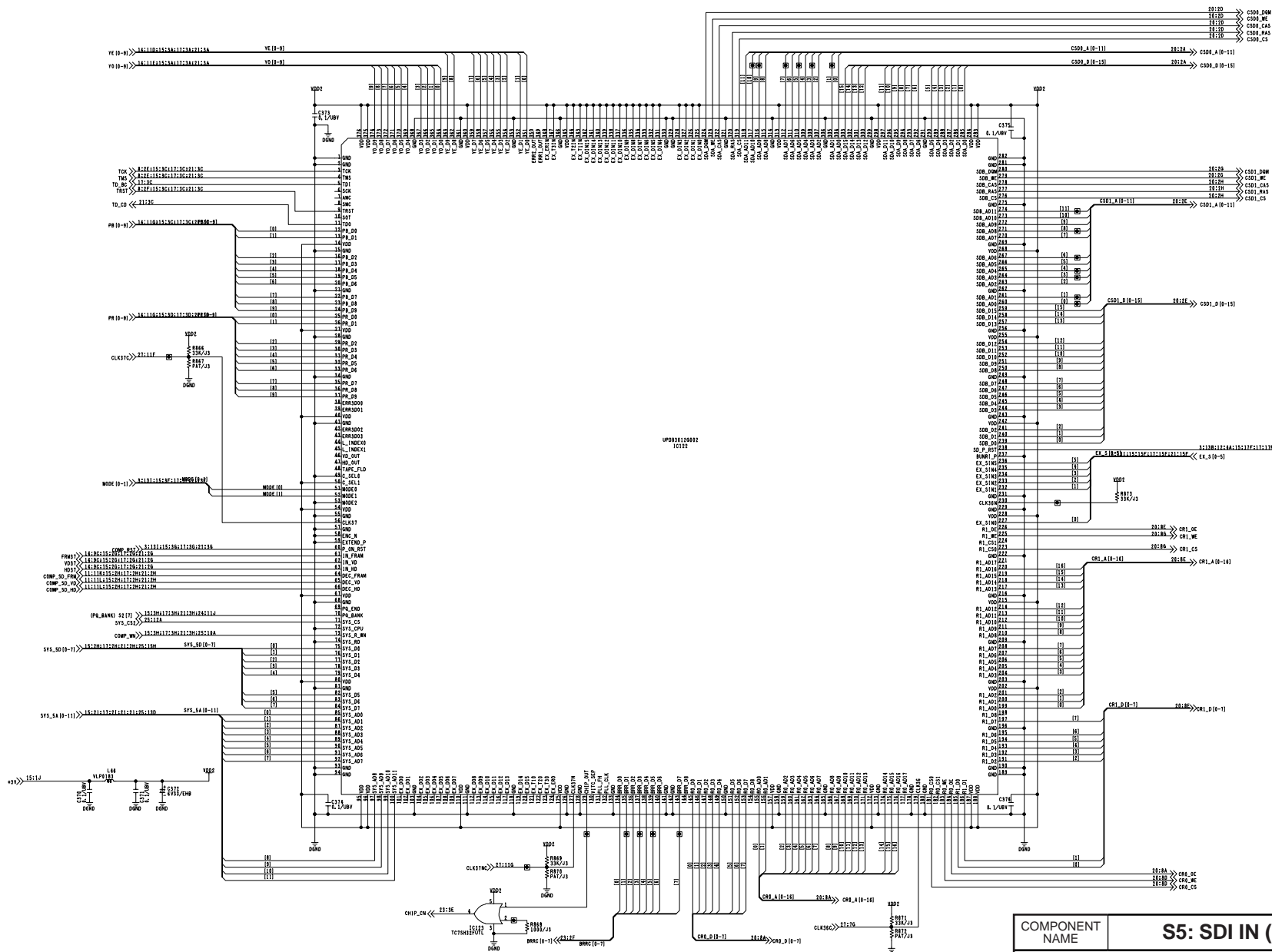
COMPONENT NAME	S5: SDI IN (COMPB)		17/27
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83509B: AJ-HD3700HP		KR30175 (17/27)	
VEP83509C: AJ-HD3700HE		SCM179	



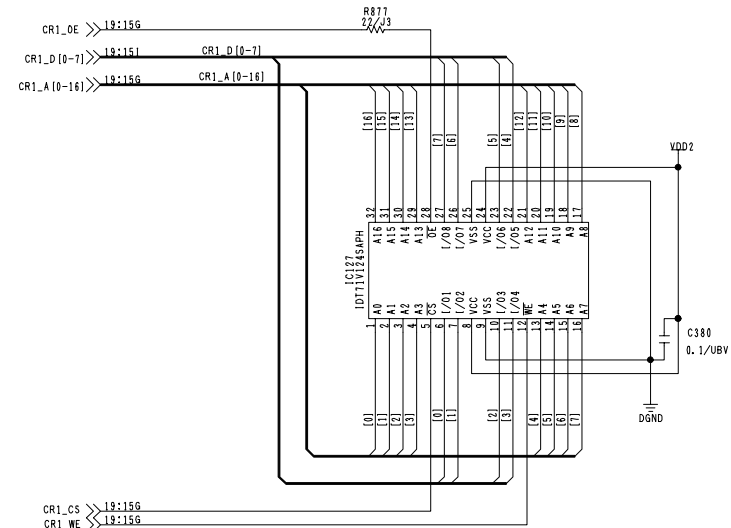
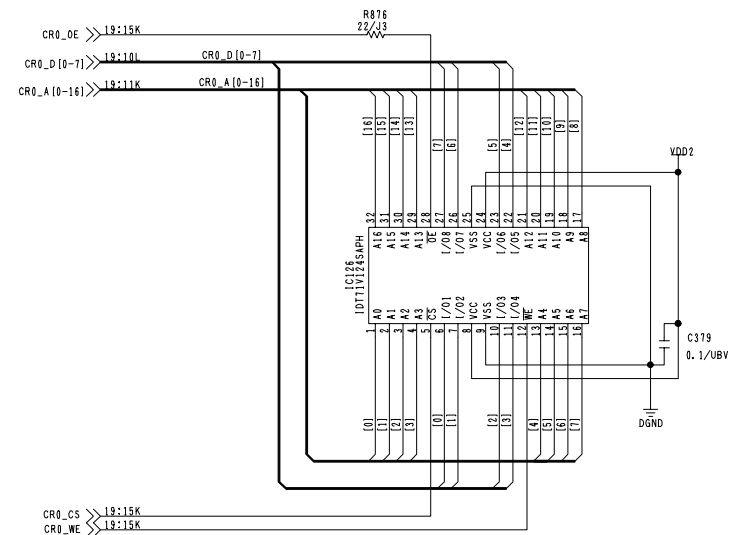
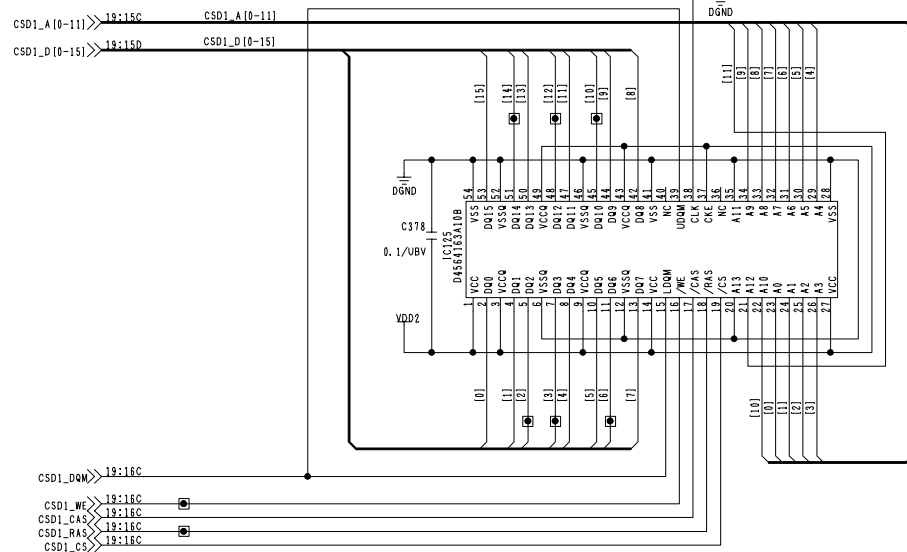
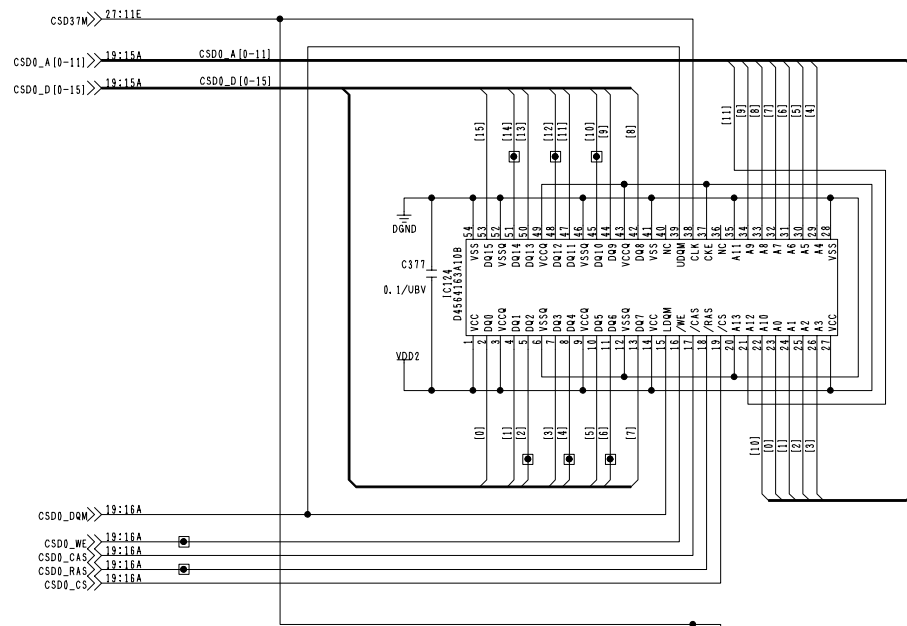
COMPONENT NAME	S5: SDI IN (MEMORYB)		18/27
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83509B: AJ-HD3700HP		KR30175 (18/27)	
VEP83509C: AJ-HD3700HE		SCM180	

A
B
C
D
E
F
G
H
I
J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

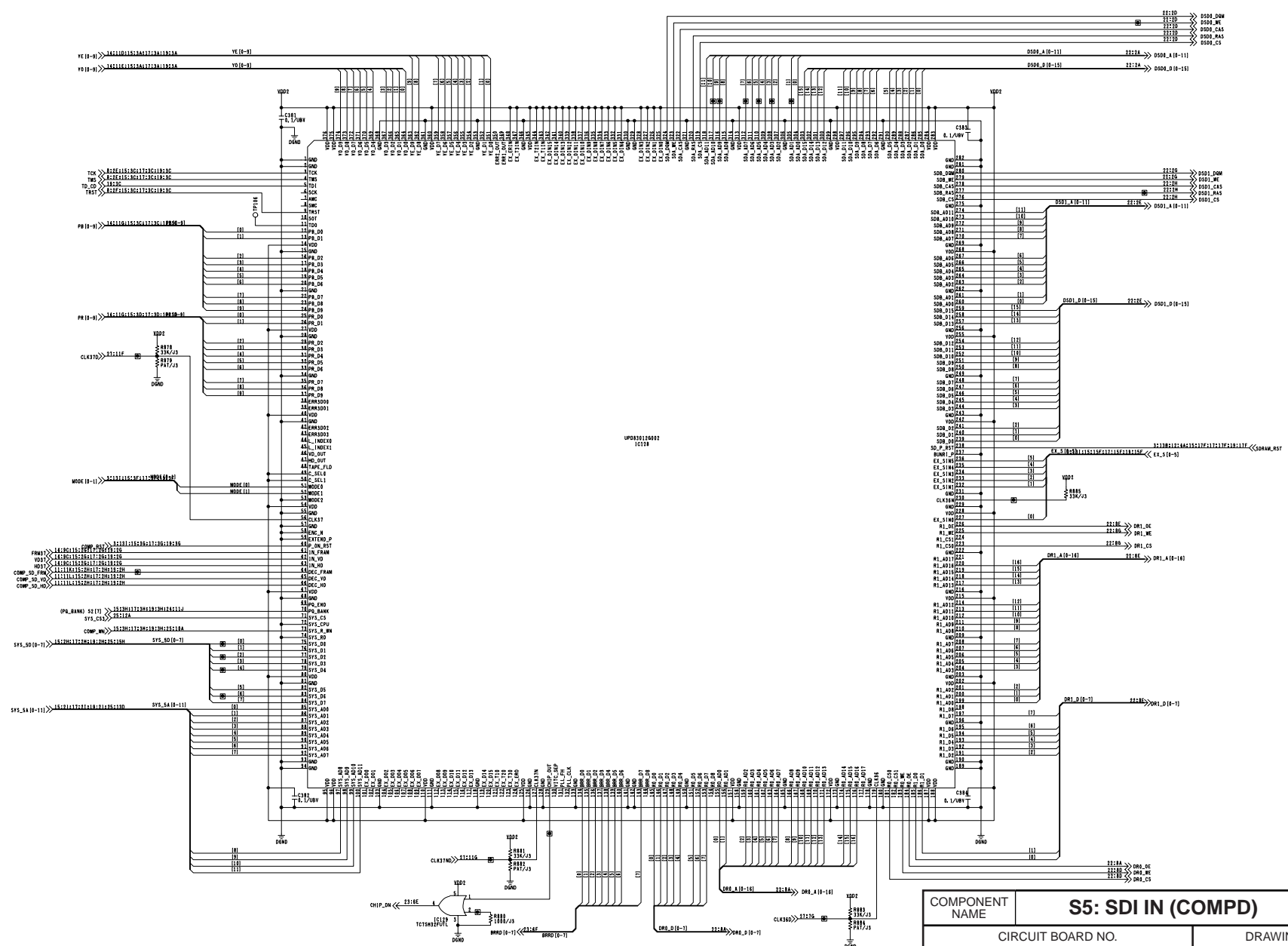


COMPONENT NAME	S5: SDI IN (COMPC)		19/27
	CIRCUIT BOARD NO.		DRAWING NO.
	VEP83509B: AJ-HD3700HP VEP83509C: AJ-HD3700HE		KR30175 (19/27)
			SCM181

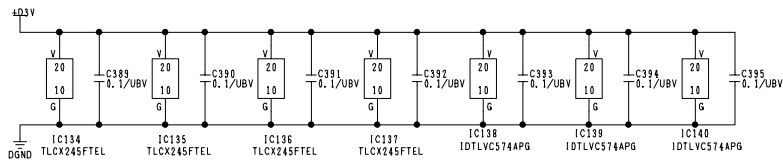
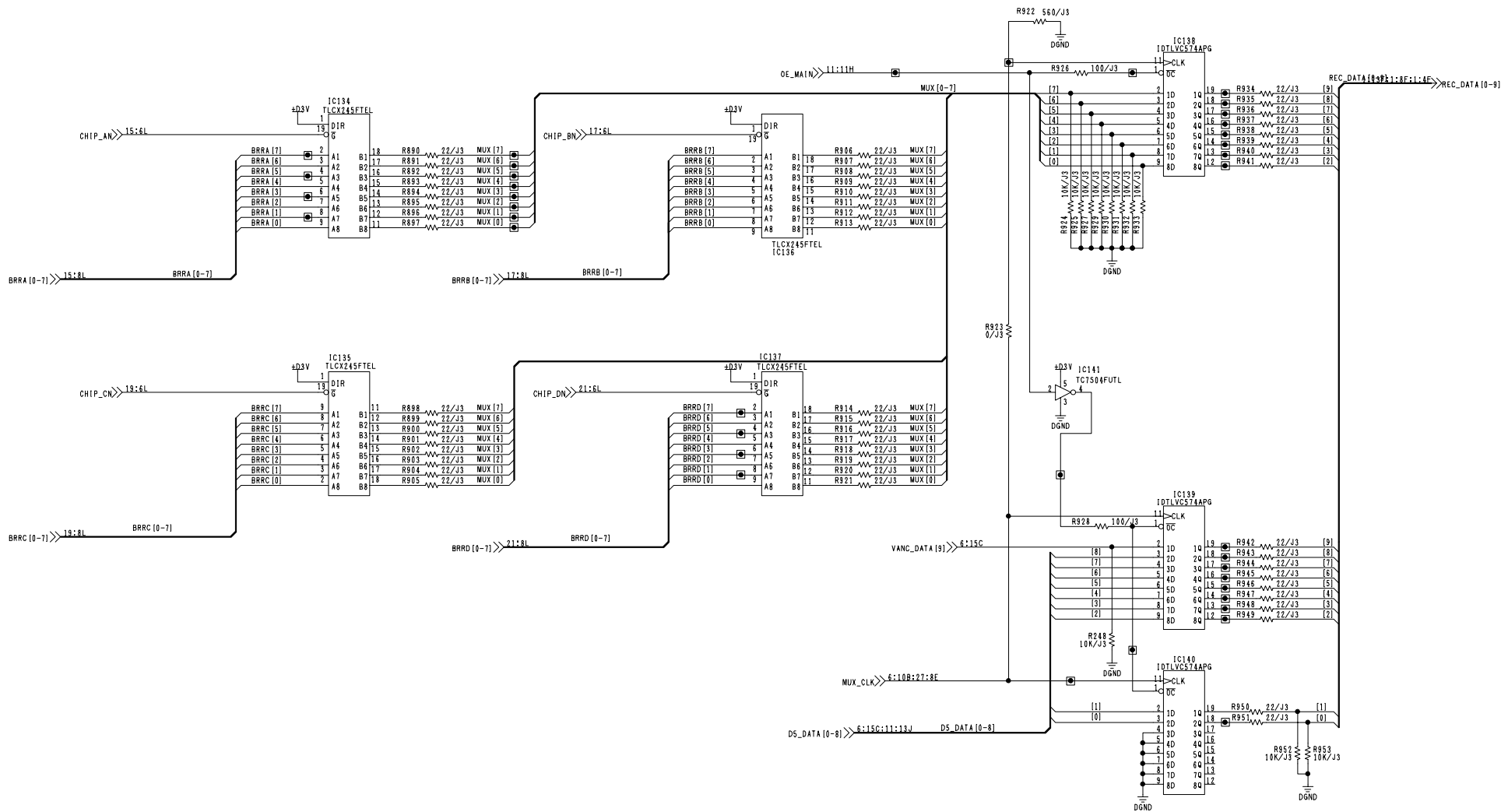


COMPONENT NAME	S5: SDI IN (MEMORYC)	20/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP		KR30175 (20/27)
VEP83509C: AJ-HD3700HE		SCM182

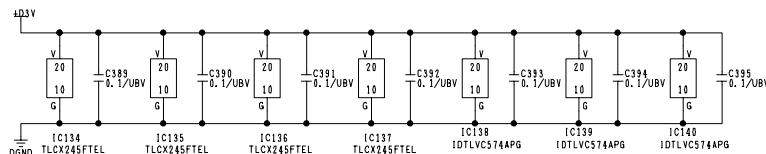
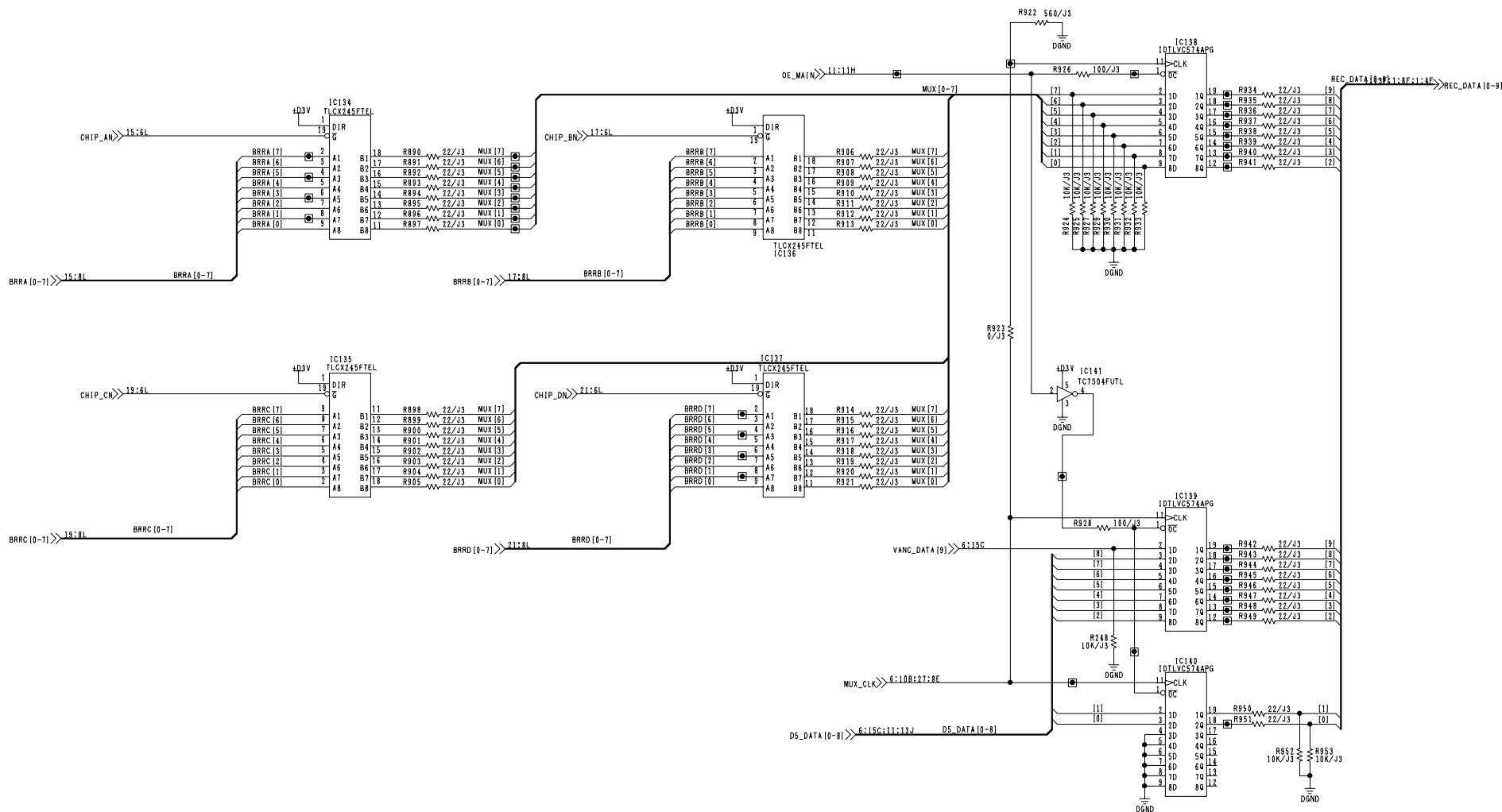
A
B
C
D
E
F
G
H
I
J



COMPONENT NAME	S5: SDI IN (COMPD)		21/27
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83509B: AJ-HD3700HP		KR30175 (21/27)	
VEP83509C: AJ-HD3700HE		SCM183	

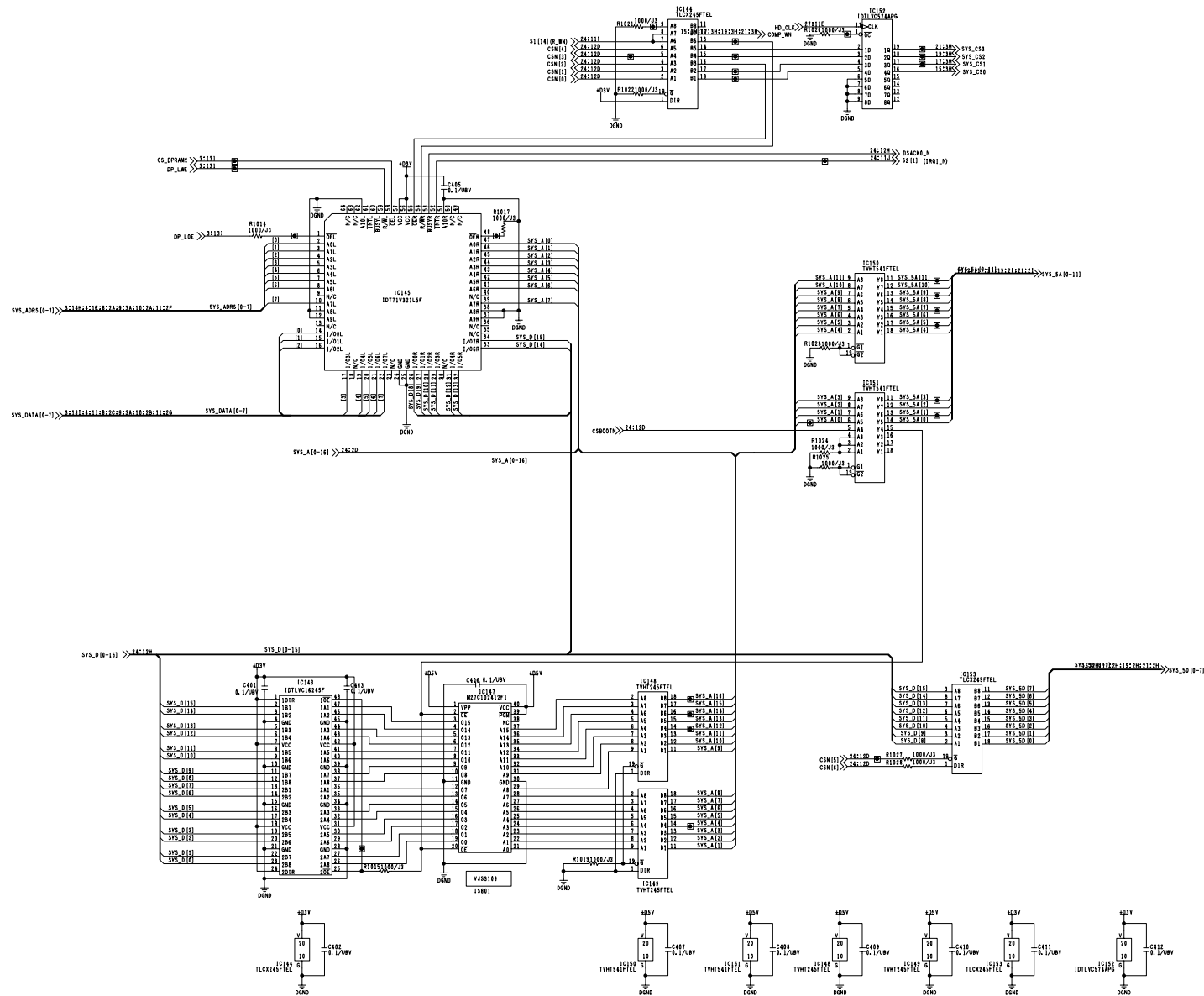


COMPONENT NAME	S5: SDI IN (MEMORYD)	22/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP		KR30175 (22/27)
VEP83509C: AJ-HD3700HE		SCM184

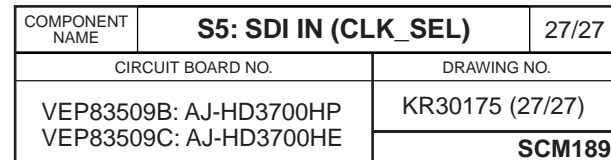


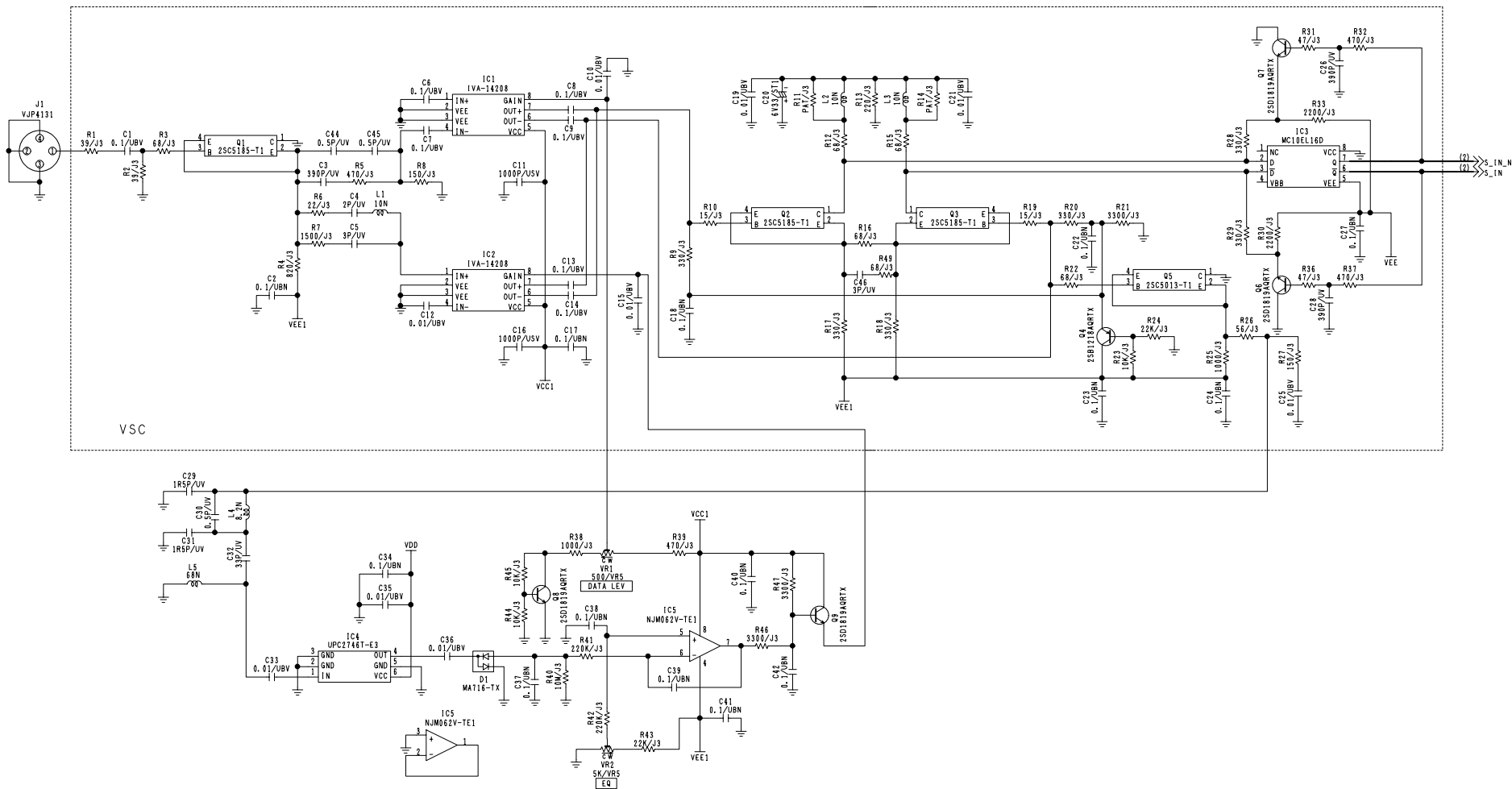
COMPONENT NAME	S5: SDI IN (DATA_MUX)	23/27
CIRCUIT BOARD NO.		DRAWING NO.
VEP83509B: AJ-HD3700HP		KR30175 (23/27)
VEP83509C: AJ-HD3700HE		SCM185



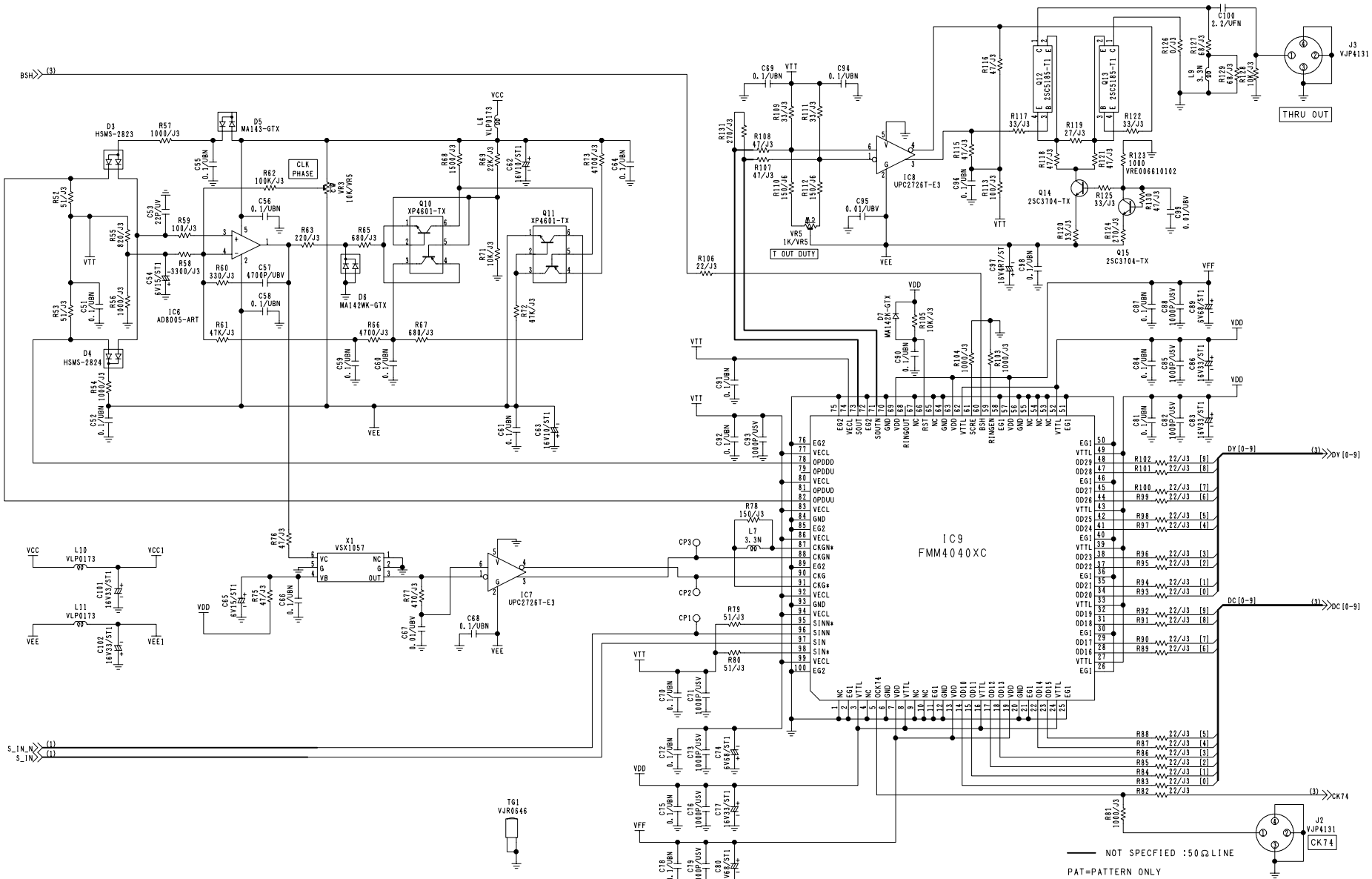


COMPONENT NAME	S5: SDI IN (CPUB)	25/27
CIRCUIT BOARD NO.	VEP83509B: AJ-HD3700HP VEP83509C: AJ-HD3700HE	DRAWING NO. KR30175 (25/27)
		SCM187

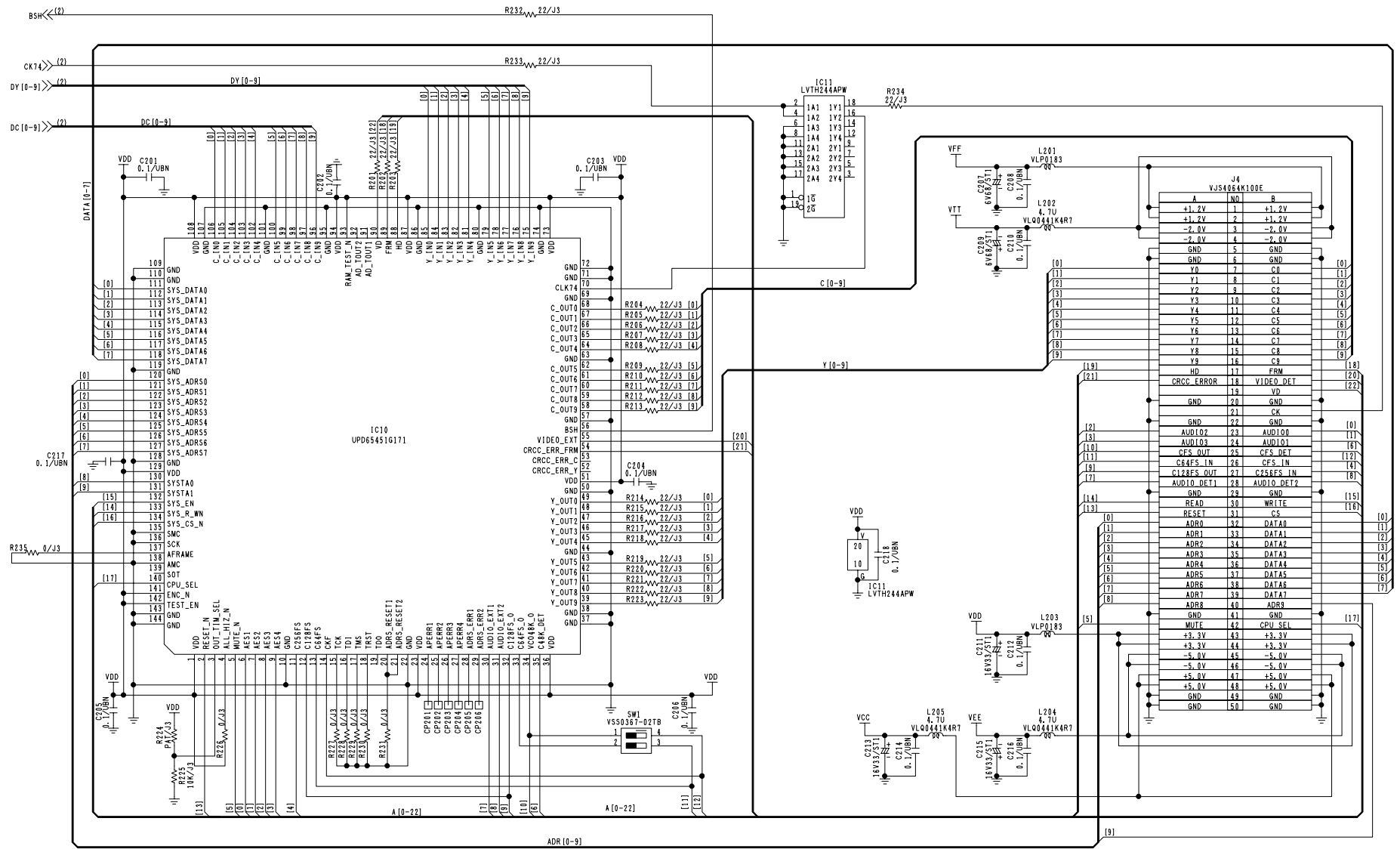




COMPONENT NAME	S5:HD SDI RX (EQ)	01/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83459B	KR3X19 (1/3)	
	SCM190	

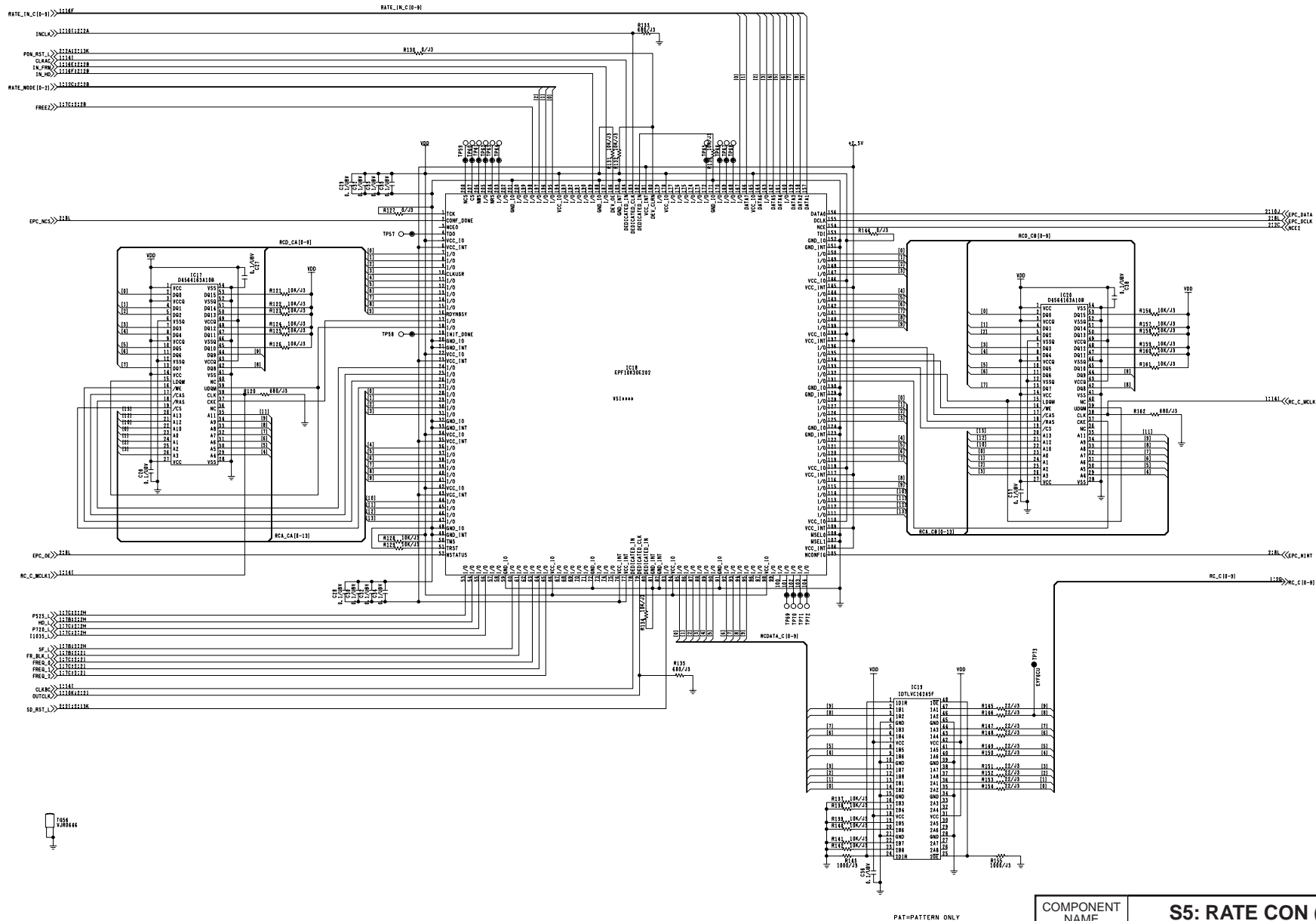


COMPONENT NAME	S5: HD SDI RX (CKR, S/P)	02/03
CIRCUIT BOARD NO.	VEP83459B	DRAWING NO.
		KR3X19 (2/3)
		SCM191

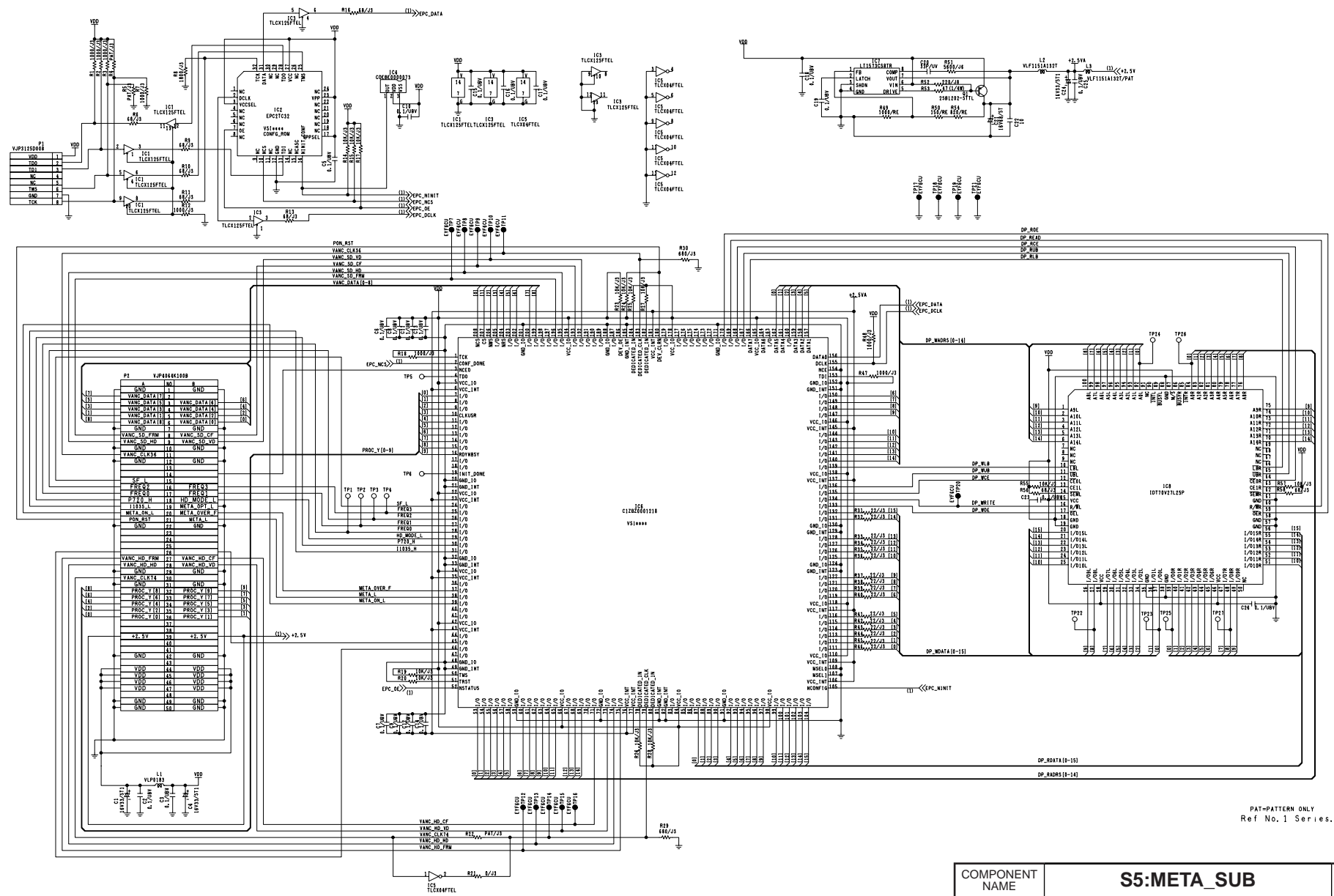


PAT= PATTERN ONLY

COMPONENT NAME	S5: HD SDI RX (DEC)	03/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83459B	KR3X19 (3/3)	
		SCM192

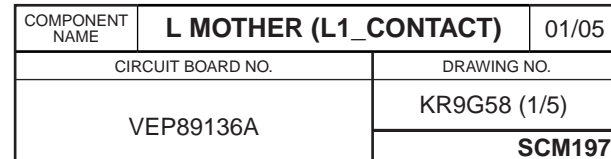


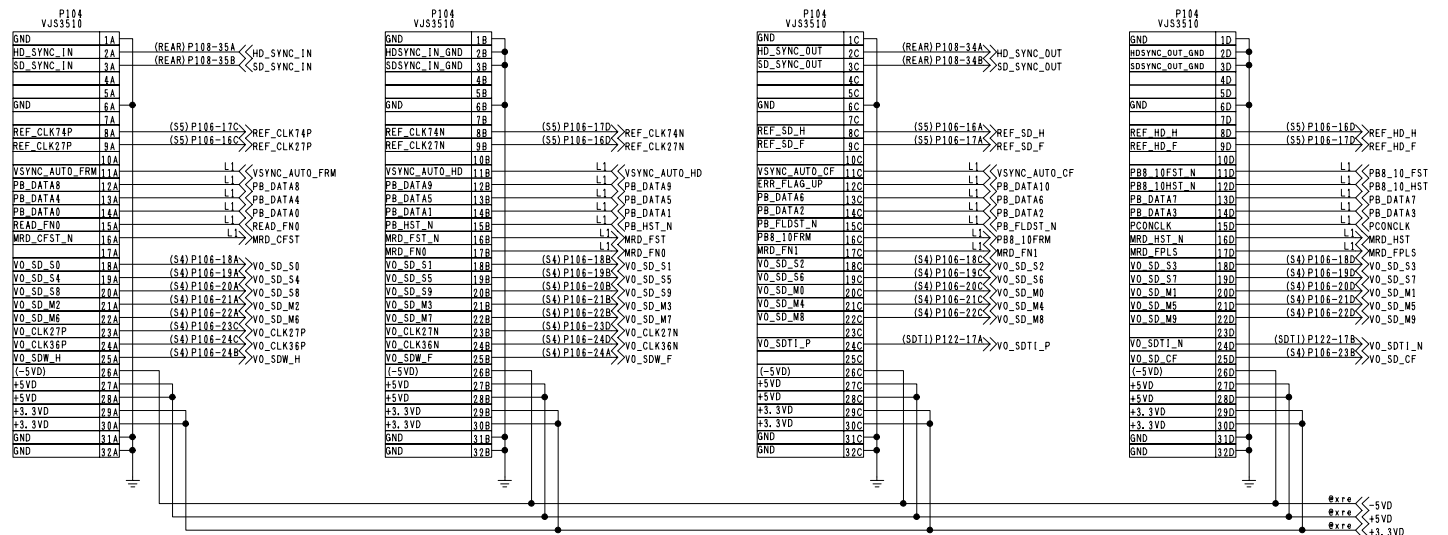
COMPONENT NAME	S5: RATE CON (RC_C)	03/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP83510A		KR3Y71 (3/3)
		SCM195



PAT=PATTERN ONLY
Ref No.1 Series.

COMPONENT NAME	S5:META_SUB	01/01
CIRCUIT BOARD NO.	VEP83550A	DRAWING NO.
		KR30080 (01/01)
		SCM196





P105	
VJP4360A144	
GND	1A
RF_LD3	2A
SER1_HSW	3A
GND	4A
VO_HD1_MAIN_P	5A
VO_HD3_MAIN_P	7A
GND	8A
VO_HD1_MONI_P	9A
VO_HD3_MONI_P	10A
GND	11A
IN_HD_F	12A
IN_CLK74P	13A
IN_CLK27P2	14A
REC_SD_CF	15A
IN_SD_CF	16A
REC_DATA8	17A
REC_DATA4	18A
REC_DATA0	19A
MAIN_CMPST_OUT	20A
GND	21A
OUT_TC_FRM	22A
SE60	23A
OUTER_VSYNC	24A
CH0_ATSYNC	25A
REC_HSW	26A
PB_TC_FRM	27A
SV_HSW	28A
SV5_RST	29A
AV_CS4	30A
AV_BUS_ADRS12	31A
AV_BUS_ADRS8	32A
AV_BUS_ADRS4	33A
AV_BUS_ADRS0	34A
AV_BUS_DATA4	35A
AV_BUS_DATA0	36A

P105	
VJP4360A144	
GND	1B
RF_SDAT4	2B
RF_OSCCLK	3B
GND	4B
VO_HD1_MAIN_N	5B
VO_HD3_MAIN_N	7B
GND	8B
VO_HD1_MONI_N	9B
VO_HD3_MONI_N	10B
GND	11B
IN_HD_H	12B
IN_CLK74N	13B
IN_CLK27N2	14B
REC_SD_FST	15B
IN_SD_FRM	16B
REC_DATA9	17B
REC_DATA5	18B
REC_DATA1	19B
MONI_CMPST_OUT	20B
GND	21B
OUT_TC_VSYNC	22B
SE61	23B
ERR_STB_N	24B
CH1_ATSYNC	25B
PB1_TPFM	26B
PB_TC_HSYNC	27B
SV_FV2	28B
AV_CS5	29B
AV_BUS_ADRS13	30B
AV_BUS_ADRS9	31B
AV_BUS_ADRS5	32B
AV_BUS_ADRS1	33B
AV_BUS_DATA5	34B
AV_BUS_DATA1	35B

P105	
VJP4360A144	
GND	1C
REC_MODE	2C
GND	3C
VO_HD2_MAIN_P	4C
VO_HD2_CLK_P	7C
GND	8C
VO_HD2_MONI_P	9C
VO_HD2_CLK_P	10C
GND	11C
REF_SD_CF	12C
IN_CLK27P1	13C
PB_TC_CLK18P	14C
REC_SD_HST	15C
IN_SD_H	16C
REC_TC_D	17C
REC_DATA6	18C
REC_DATA2	19C
VO_4FSCF	20C
GND	21C
OUT_TC_HSYNC	22C
FL00	23C
CH01_TNO_MSB	24C
CH0_ATWCLK	25C
PB_HSW	26C
GND	27C
SV_FV4	28C
PB_TC_VSYNC	29C
AV_WRITE	30C
AV_BUS_ADRS14	31C
AV_BUS_ADRS10	32C
AV_BUS_ADRS6	33C
AV_BUS_ADRS2	34C
AV_BUS_DATA6	35C
AV_BUS_DATA2	36C

P105	
VJP4360A144	
GND	1D
REC_ENV	2D
REC_ENV_CONT1	3D
GND	4D
VO_HD2_MAIN_N	5D
VO_HD2_CLK_N	7D
GND	8D
VO_HD2_MONI_N	9D
VO_HD2_CLK_N	10D
GND	11D
720P_FRM	12D
IN_CLK27N1	13D
PB_TC_CLK18N	14D
REC_SD_VST	15D
SEGVAGUE	16D
REC_TC_G	17D
REC_DATA7	18D
REC_DATA3	19D
VO_4FSCN	20D
GND	21D
OUT_LTC_CLK	22D
FL01	23D
CH01_TNO_MSB	24D
CH1_ATWCLK	25D
AUDIO_GATE_N	26D
PB_VITC_DATA	27D
SV_FV8	28D
720_C_DATA8	29D
AV_READ	30D
AV_BUS_ADRS15	31D
AV_BUS_ADRS11	32D
AV_BUS_ADRS7	33D
AV_BUS_ADRS3	34D
AV_BUS_DATA7	35D
AV_BUS_DATA3	36D

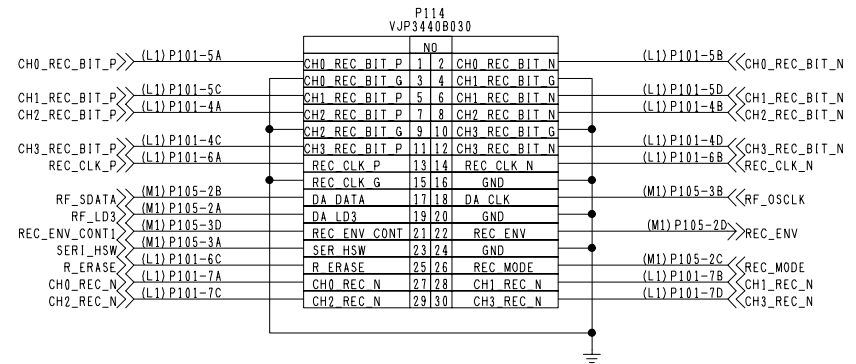
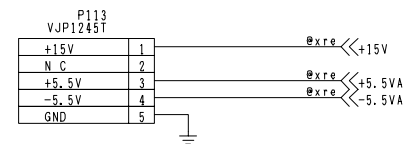
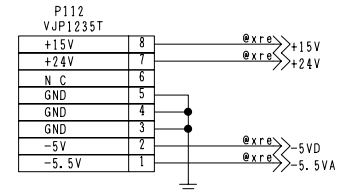
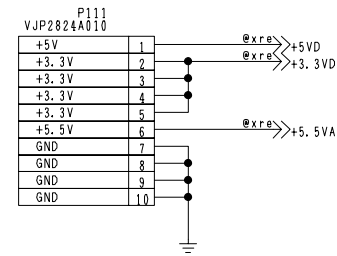
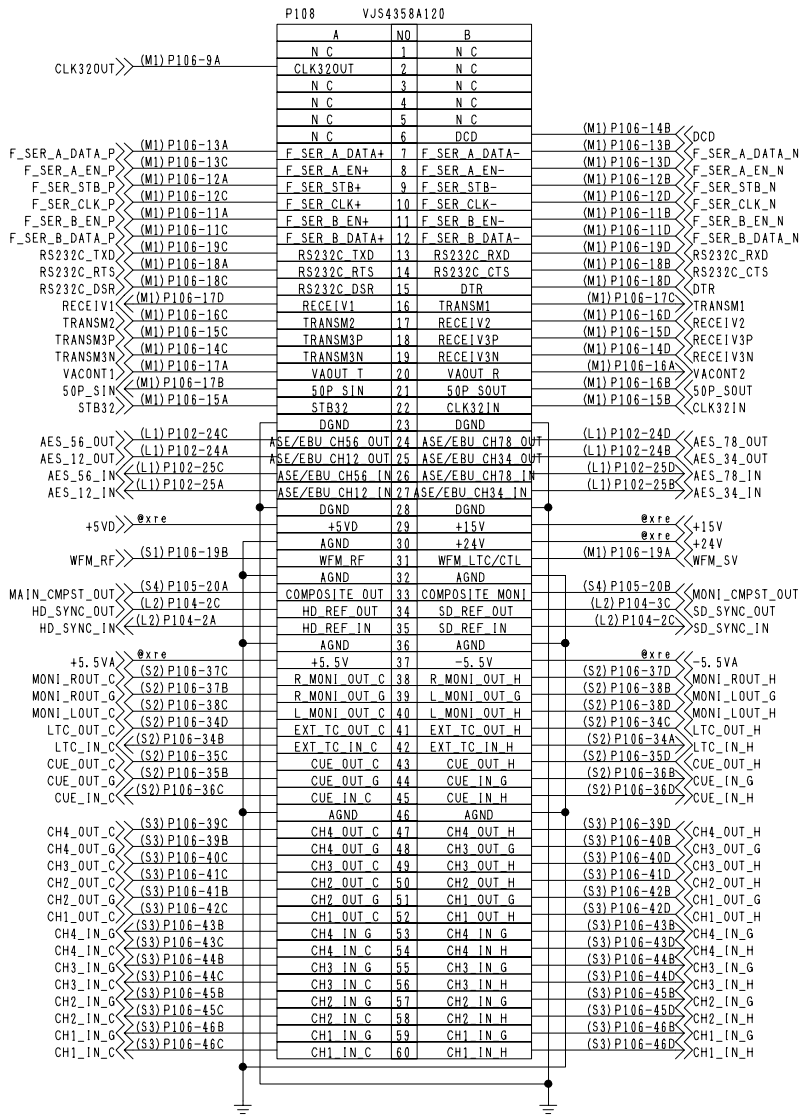
P106	
VJP4360A184	
CH3_PB_BIT_P	1A
CH2_PB_BIT_P	2A
CH1_PB_BIT_P	3A
CH0_PB_BIT_P	4A
GND	5A
F_SER_B_EN_P	6A
F_SER_STB_P	7A
F_SER_A_DATA_P	8A
CLK32OUT	9A
STB32	10A
VACONT2	11A
VACONT1	12A
RS232C_RTS	13A
WFM_CTL	14A
GND	15A
REF_SD_H	16A
REF_SD_F	17A
VO_SD_S0	18A
VO_SD_S4	19A
VO_SD_S8	20A
VO_SD_M2	21A
VO_SD_M6	22A
VO_SDW_F	23A
GND	24A
CUE_MCK	25A
ADDA_MCK	26A
ADSD12	27A
SOUT_AES12	28A
SOUT_FS128	29A
SIN_AES12	30A
GND	31A
LTC_IN_H	32A
GND	33A
GND	34A
GND	35A
GND	36A
GND	37A
GND	38A
GND	39A
GND	40A
GND	41A
GND	42A
GND	43A
GND	44A
GND	45A
GND	46A

P106	
VJP4360A184	
CH3_PB_BIT_N	1B
CH2_PB_BIT_N	2B
CH1_PB_BIT_N	3B
CH0_PB_BIT_N	4B
GND	5B
F_SER_B_EN_N	6B
F_SER_STB_N	7B
F_SER_A_DATA_N	8B
DCD	9B
CLK32IN	10B
SOP_SOUT	11B
SOP_SIN	12B
RS232C_CTS	13B
WFM_RF	14B
GND	15B
REF_HD_H	16B
REF_HD_F	17B
VO_SD_S1	18B
VO_SD_S5	19B
VO_SD_S9	20B
VO_SD_M3	21B
VO_SD_M7	22B
VO_SD_CF	23B
VO_SDW_H	24B
GND	25B
CUE_BCK	26B
ADDA_BCK	27B
ADSD34	28B
SOUT_AES34	29B
SIN_AES34	30B
DASDLR	31B
GND	32B
LTC_IN_C	33B
CUE_OUT_G	34B
CUE_IN_G	35B
MONI_CHR_G	36B
MONI_CHL_G	37B
AOUT_CH4_G	38B
AOUT_CH3_G	39B
AOUT_CH2_G	40B
AOUT_CH1_G	41B
AIN_CH4_G	42B
AIN_CH3_G	43B
AIN_CH2_G	44B
AIN_CH1_G	45B

P106	
VJP4360A184	
CH3_PB_CLK_P	1C
CH2_PB_CLK_P	2C
CH1_PB_CLK_P	3C
CH0_PB_CLK_P	4C
GND	5C
F_SER_B_DATA_P	6C
F_SER_CLK_P	7C
F_SER_A_EN_P	8C
TRANSN3N	9C
TRANSMP	10C
TRANSW2	11C
RECEIV1	12C
RS232C_DSR	13C
RS232C_TXD	14C
GND	15C
REF_CLK27P	16C
REF_CLK74P	17C
VO_SD_S2	18C
VO_SD_S6	19C
VO_SD_M0	20C
VO_SD_M4	21C
VO_SD_M8	22C
VO_CLK27P	23C
VO_CLK36P	24C
GND	25C
CUE_WCK	26C
ADDA_WCK	27C
DASD12	28C
SOUT_AES56	29C
SIN_F5256	30C
SIN_AES56	31C
SDSD1OUT_AUD12	32C
GND	33C
LTC_OUT_H	34C
CUE_OUT_C	35C
CUE_IN_C	36C
MONI_CHR_C	37C
MONI_CHL_C	38C
AOUT_CH4_C	39C
AOUT_CH3_C	40C
AOUT_CH2_C	41C
AOUT_CH1_C	42C
AIN_CH4_C	43C
AIN_CH3_C	44C
AIN_CH2_C	45C
AIN_CH1_C	46C

P106	
VJP4360A184	
CH3_PB_CLK_N	1D
CH2_PB_CLK_N	2D
CH1_PB_CLK_N	3D
CH0_PB_CLK_N	4D
GND	5D
F_SER_B_DATA_N	6D
F_SER_CLK_N	7D
F_SER_A_EN_N	8D
TRANSN3N	9D
RECEIV3N	10D
RECEIV3P	11D
RECEIV2	12D
TRANSN1	13D
OTR	14D
RS232C_RXD	15D
GND	16D
REF_CLK27N	17D
REF_CLK74N	18D
VO_SD_S3	19D
VO_SD_S7	20D
VO_SD_M1	21D
VO_SD_M5	22D
VO_SD_M9	23D
VO_CLK27N	24D
VO_CLK36N	25D
GND	26D
CUE_WIX_SD	27D
CUE_M SD	28D
DASD34	29D
SOUT_AES18	30D
SIN_F5128	31D
SIN_AES18	32D
SDSD1OUT_AUD34	33D
GND	34D
LTC_OUT_C	35D
CUE_OUT_H	36D
CUE_IN_H	37D
MONI_CHR_H	38D
MONI_CHL_H	39D
AOUT_CH4_H	40D
AOUT_CH3_H	41D
AOUT_CH2_H	42D
AOUT_CH1_H	43D
AIN_CH4_H	44D
AIN_CH3_H	45D
AIN_CH2_H	46D
AIN_CH1_H	47D

COMPONENT NAME	L MOTHER (S_CONTACT)	03/05
CIRCUIT BOARD NO.		DRAWING NO.
VEP89136A		KR9G58 (3/5)
		SCM199



COMPONENT NAME	L MOTHER (REAR_CONTACT)	04/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP89136A	KR9G58 (4/5)	
	SCM200	

A

B

C

D

E

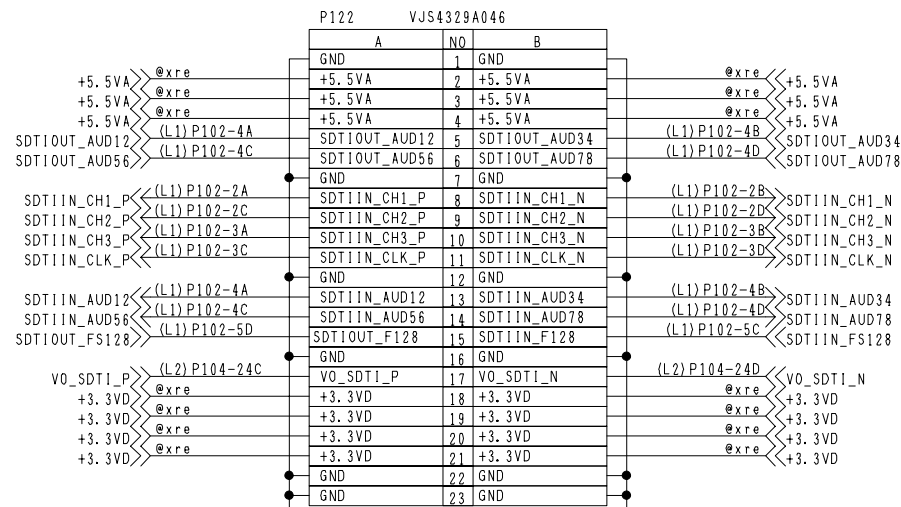
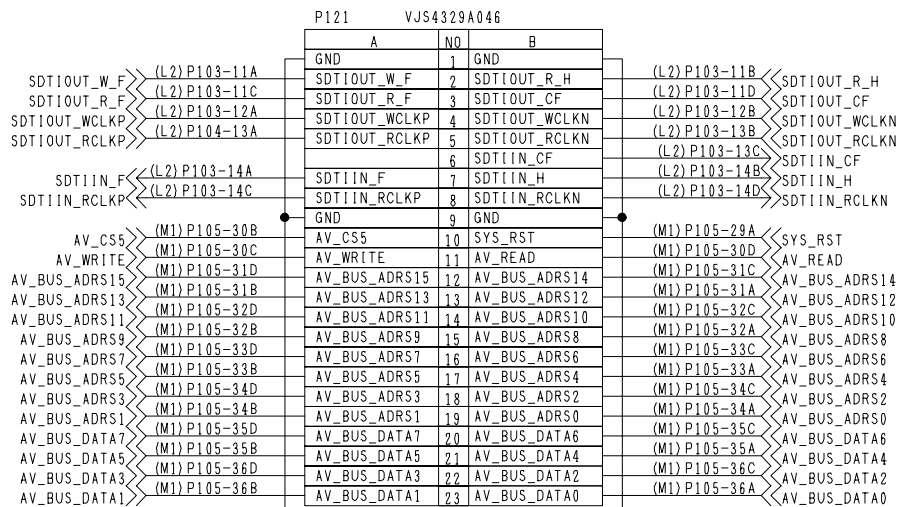
F

G

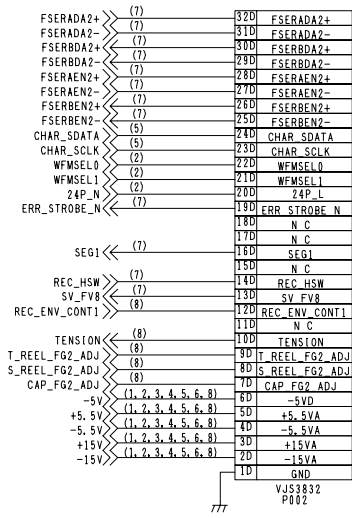
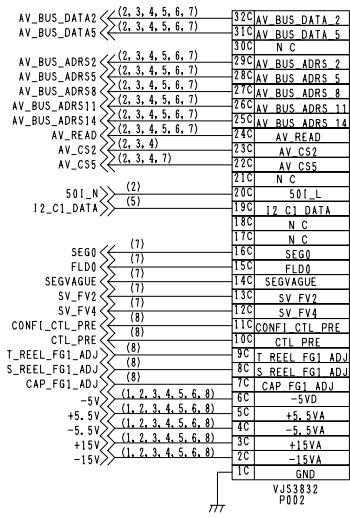
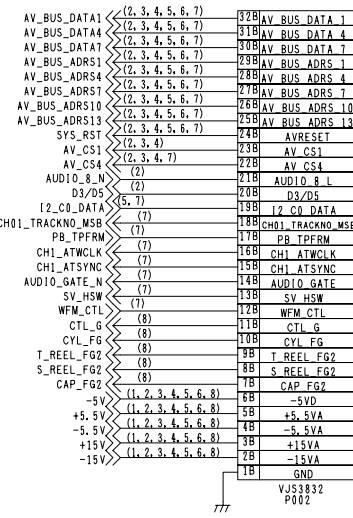
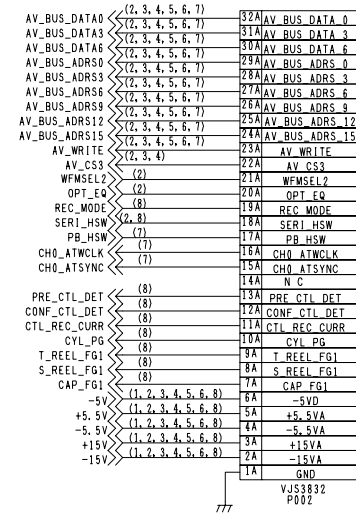
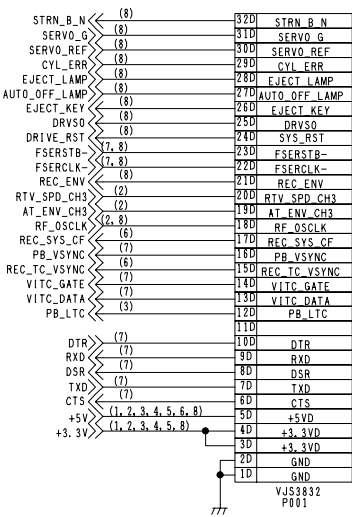
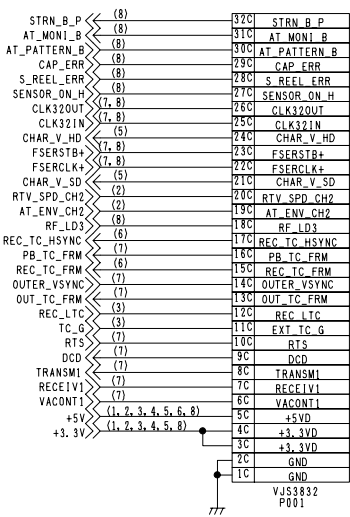
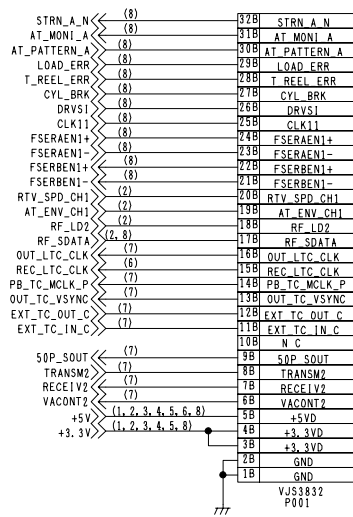
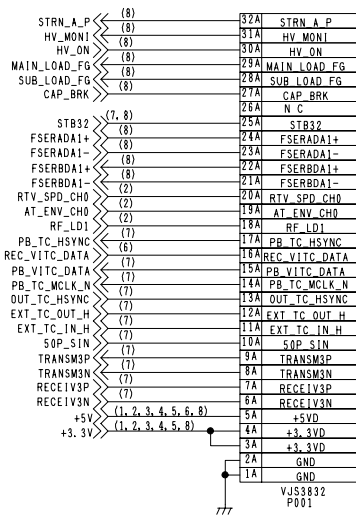
H

I

J

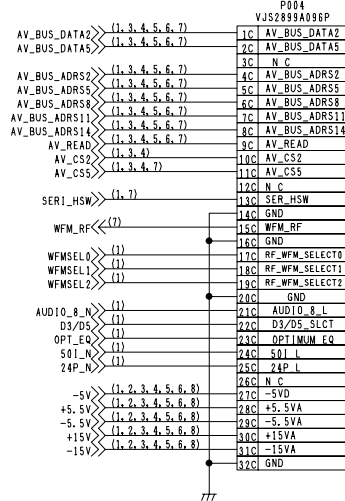
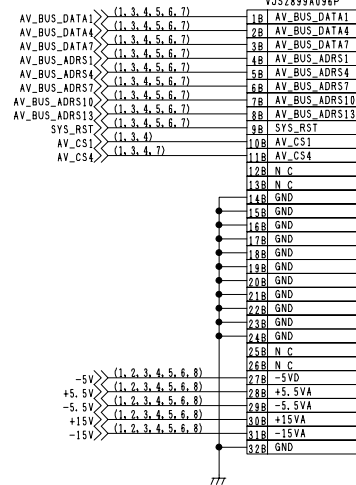
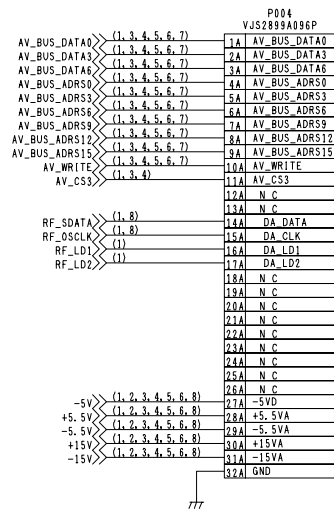
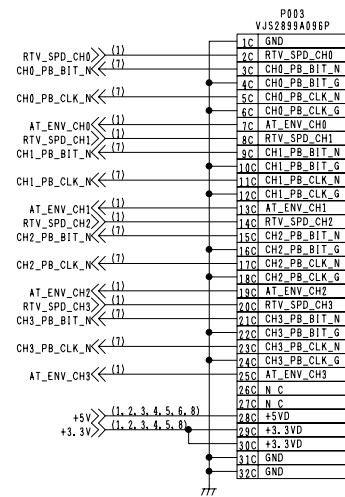
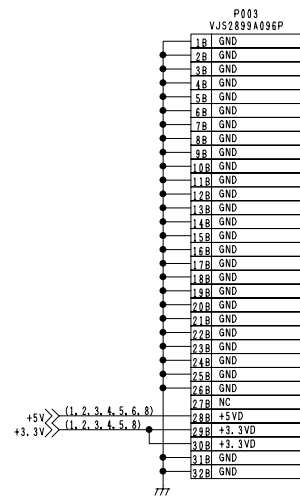
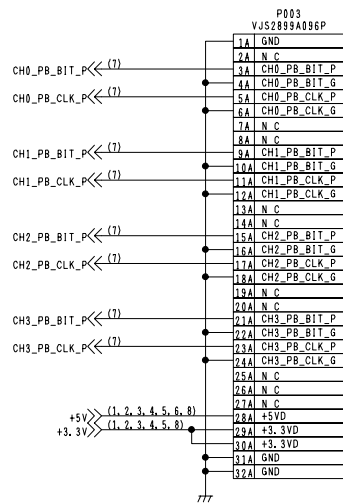


COMPONENT NAME	L MOTHER (SDTI_CONTACT)	05/05
CIRCUIT BOARD NO.		DRAWING NO.
VEP89136A		KR9G58 (5/5)
		SCM201

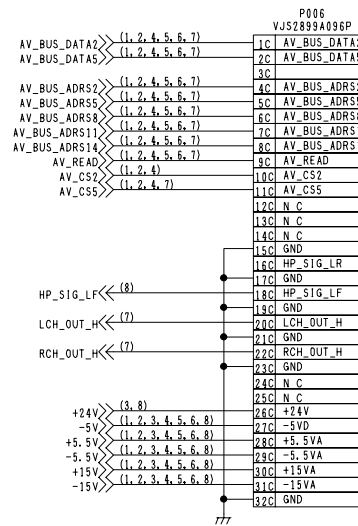
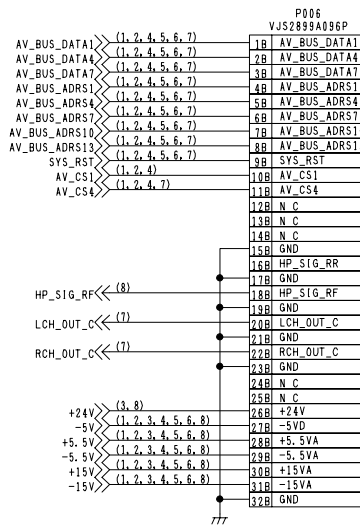
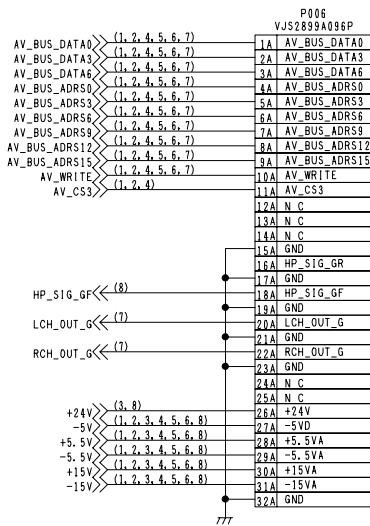
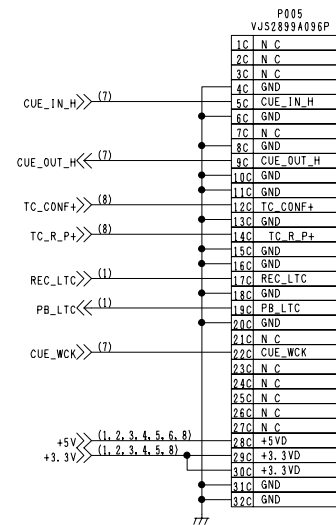
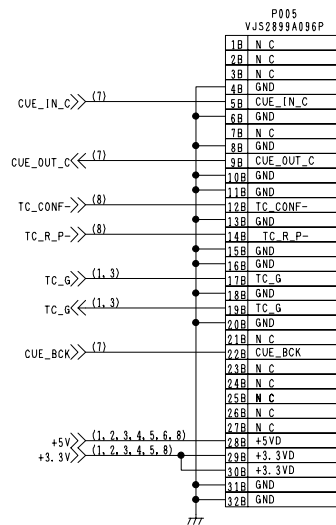
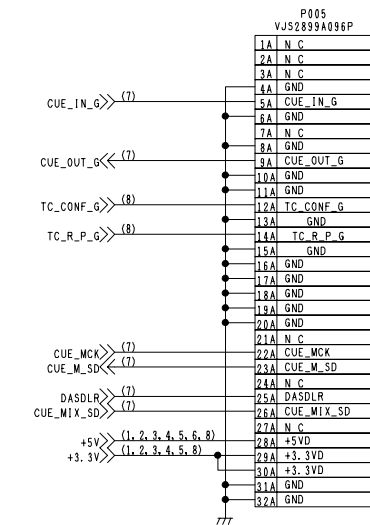


COMPONENT NAME	S-MOTHER	01/08
CIRCUIT BOARD NO.		DRAWING NO.
VEP89137A		KR9G58 (1/8)
		SCM202



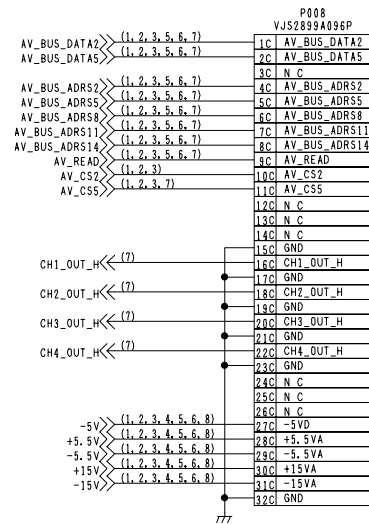
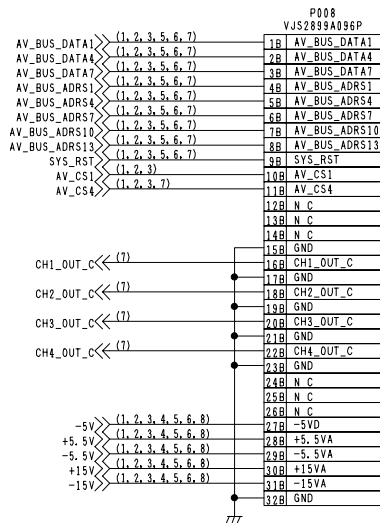
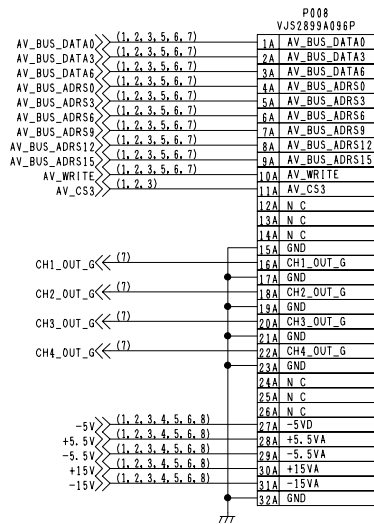
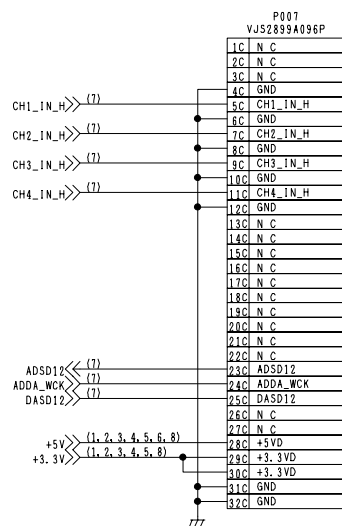
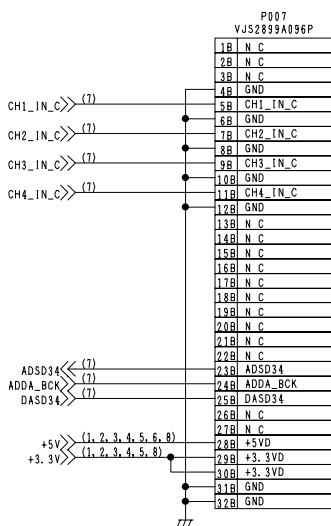
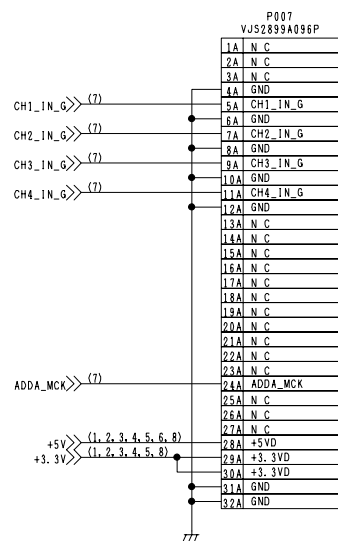


COMPONENT NAME	S-MOTHER		02/08
	CIRCUIT BOARD NO.		DRAWING NO.
	VEP89137A		KR9G58 (2/8)
			SCM203

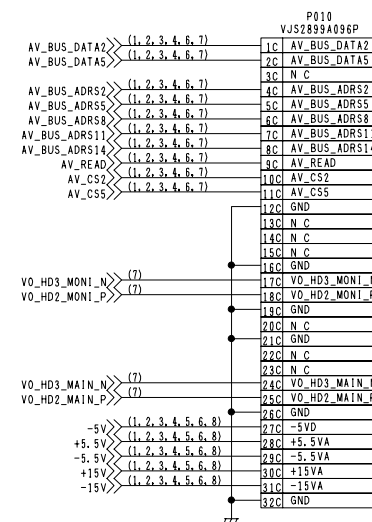
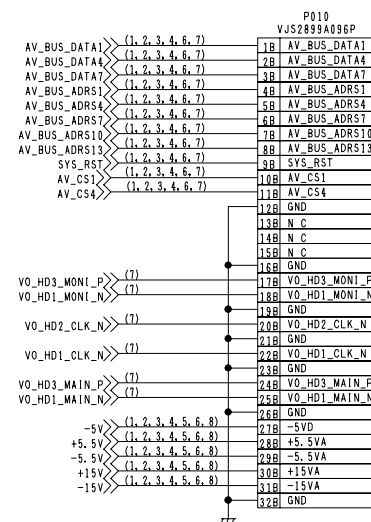
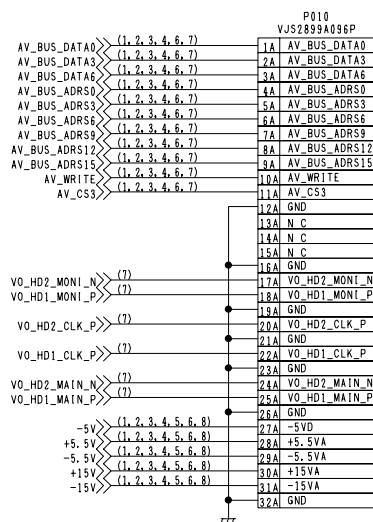
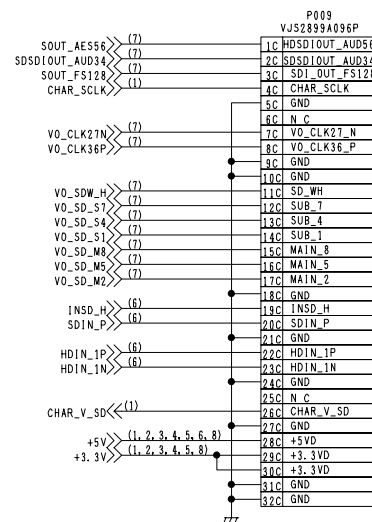
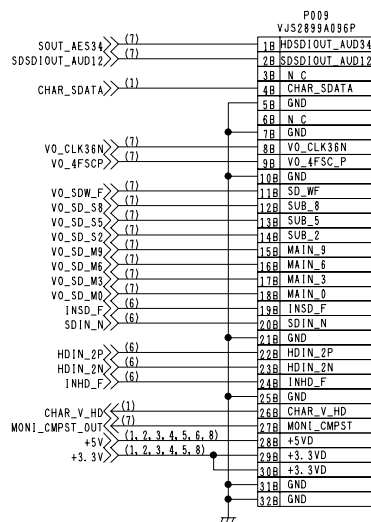
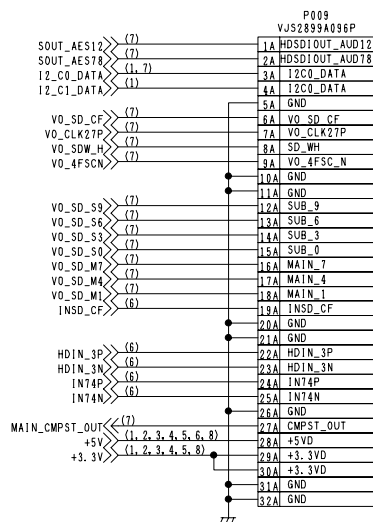


COMPONENT NAME	S-MOTHER		03/08
CIRCUIT BOARD NO.		DRAWING NO.	
VEP89137A		KR9G58 (3/8)	
		SCM204	

S 3



COMPONENT NAME	S-MOTHER		04/08
	CIRCUIT BOARD NO.		DRAWING NO.
	VEP89137A		KR9G58 (4/8)
			SCM205



COMPONENT NAME	S-MOTHER		05/08
	CIRCUIT BOARD NO.		DRAWING NO.
VEP89137A		KR9G58 (5/8)	
		SCM206	

1

2

3

4

5

6

7

8

9

10

11

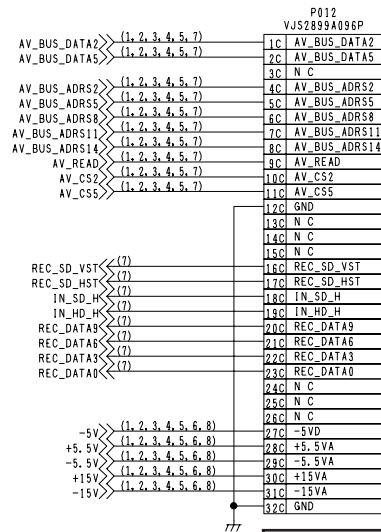
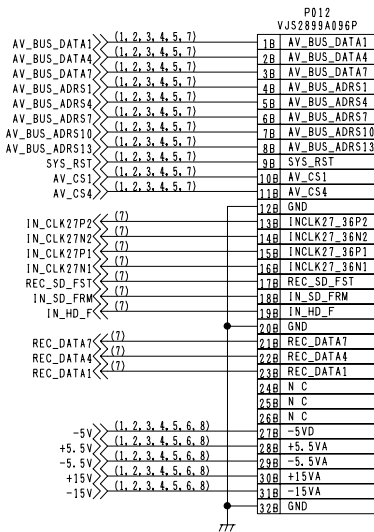
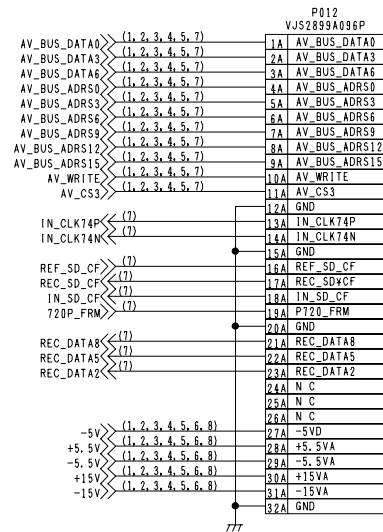
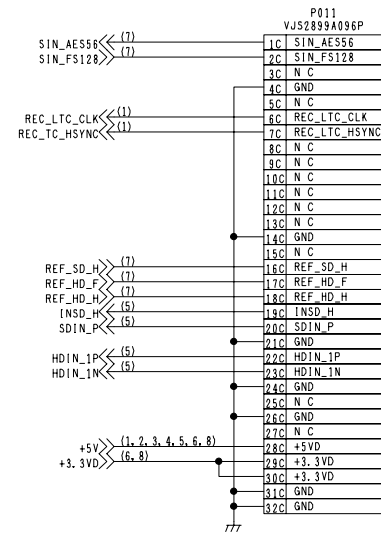
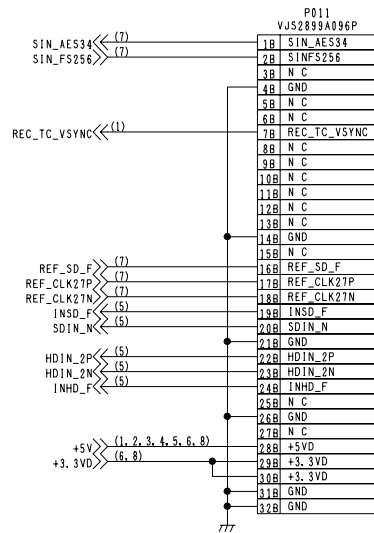
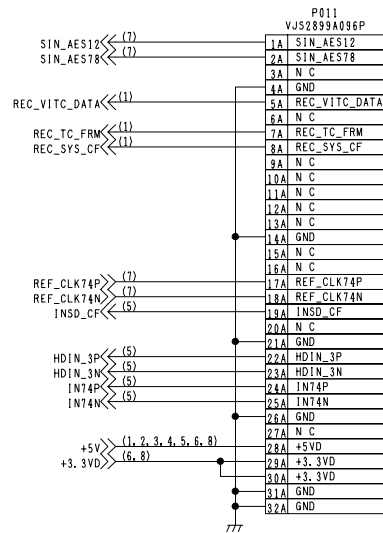
12

13

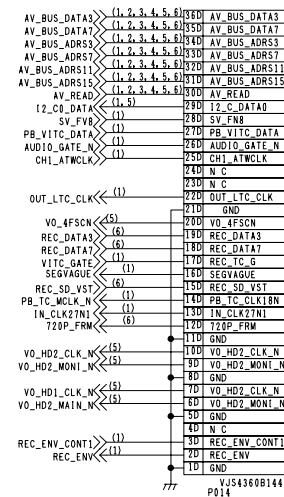
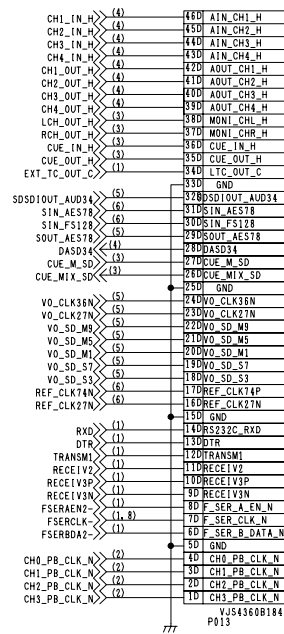
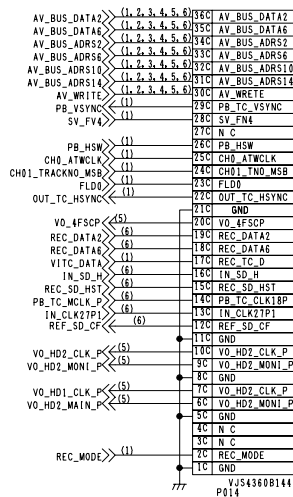
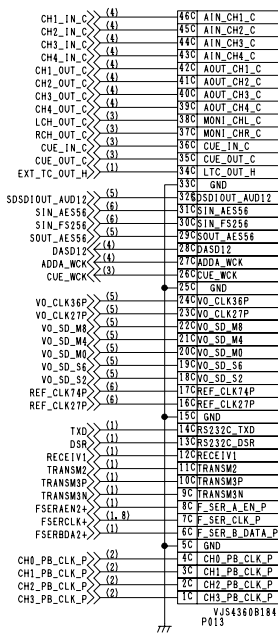
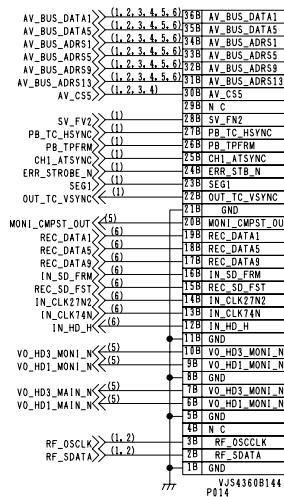
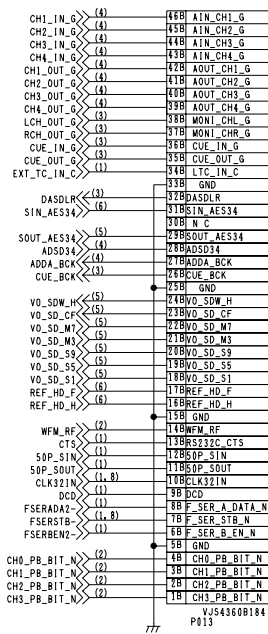
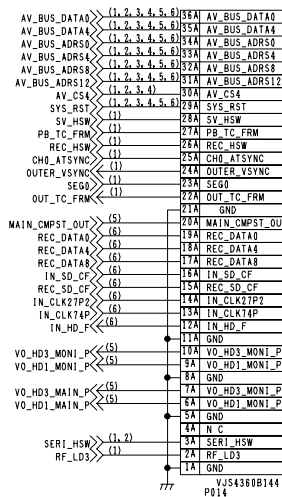
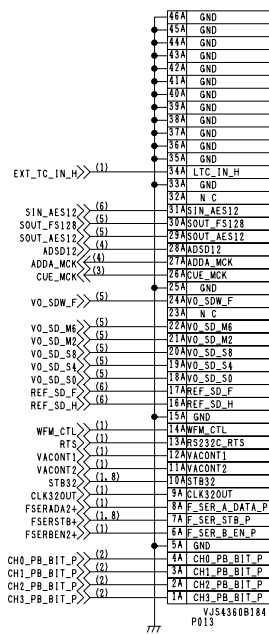
14

15

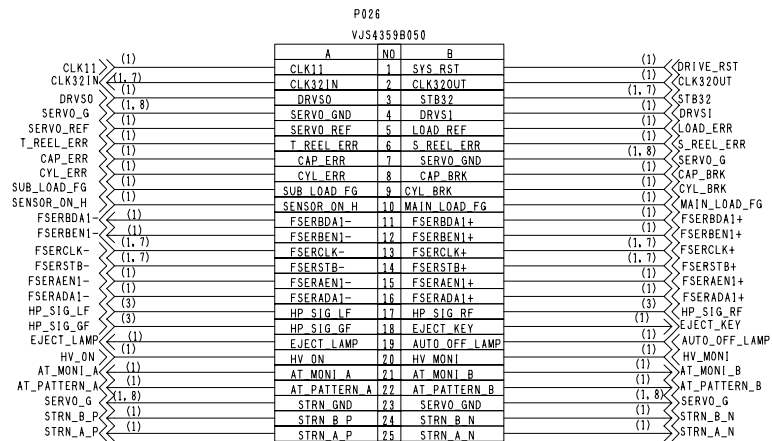
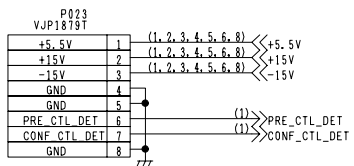
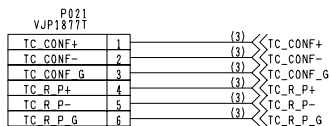
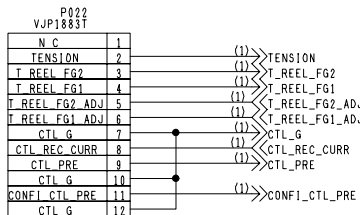
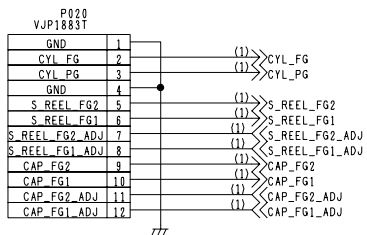
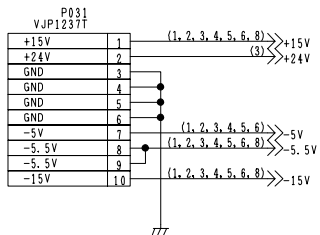
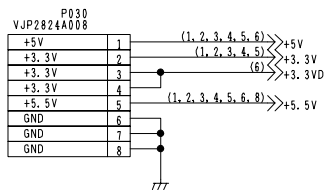
S5



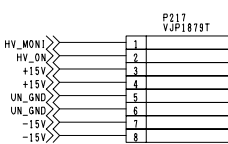
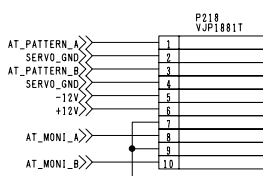
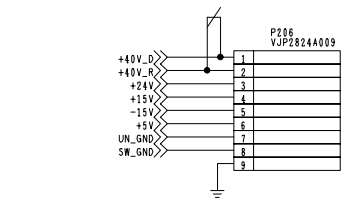
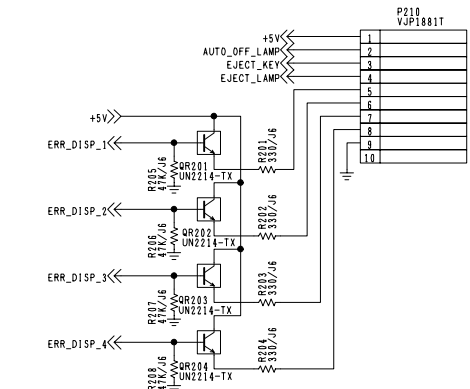
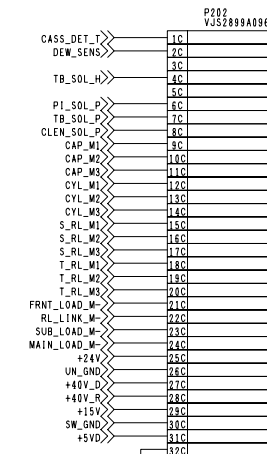
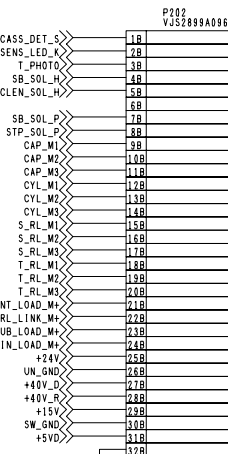
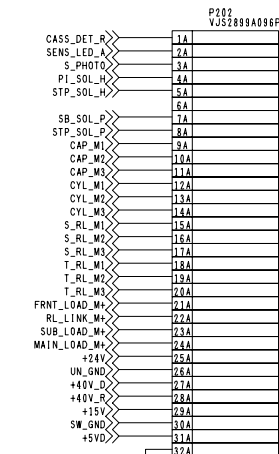
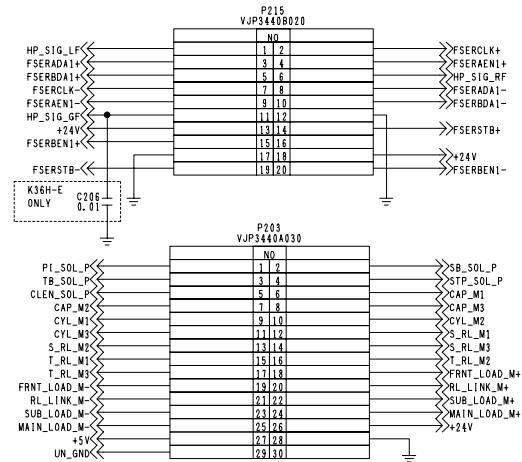
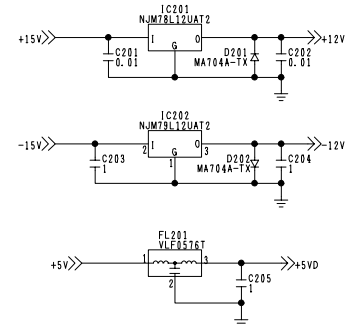
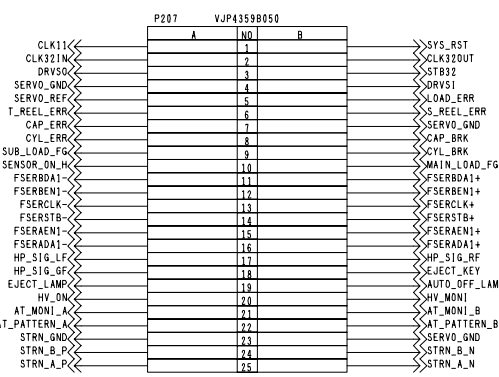
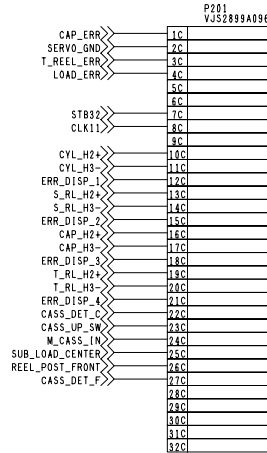
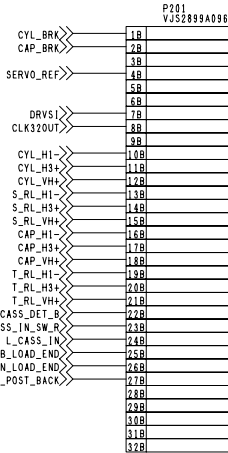
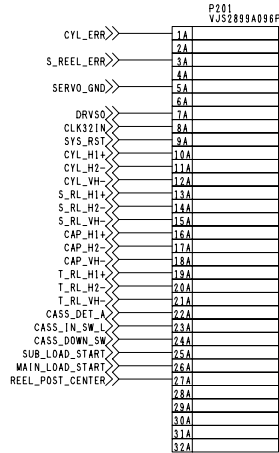
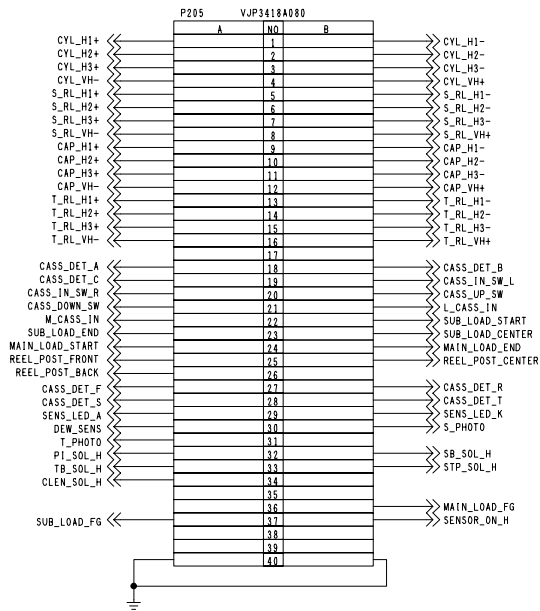
COMPONENT NAME	S-MOTHER		06/08
	CIRCUIT BOARD NO.		DRAWING NO.
	VEP89137A		KR9G58 (6/8)
			SCM207



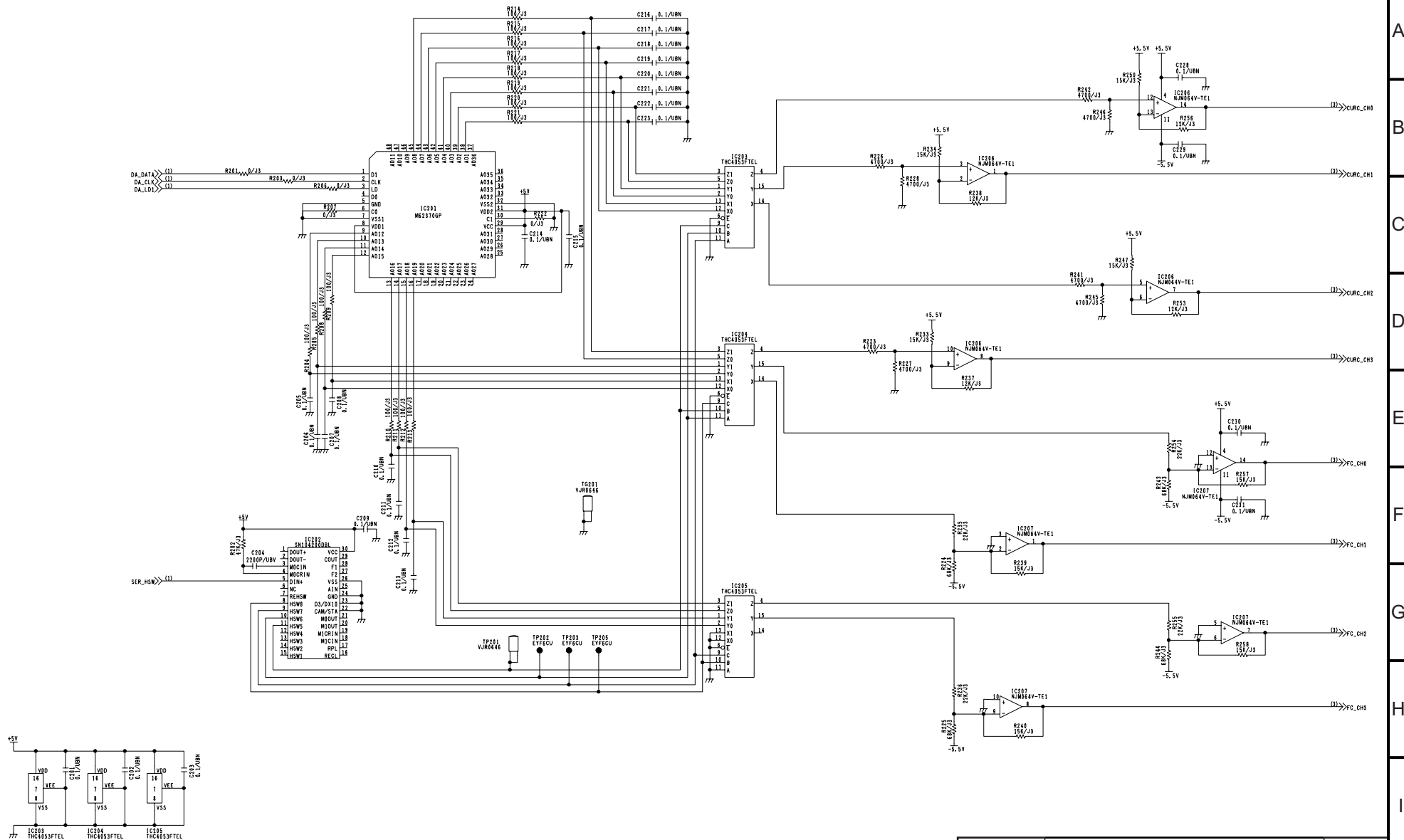
COMPONENT NAME	S-MOTHER		07/08
CIRCUIT BOARD NO.		DRAWING NO.	
VEP89137A		KR9G58 (7/8)	
		SCM208	



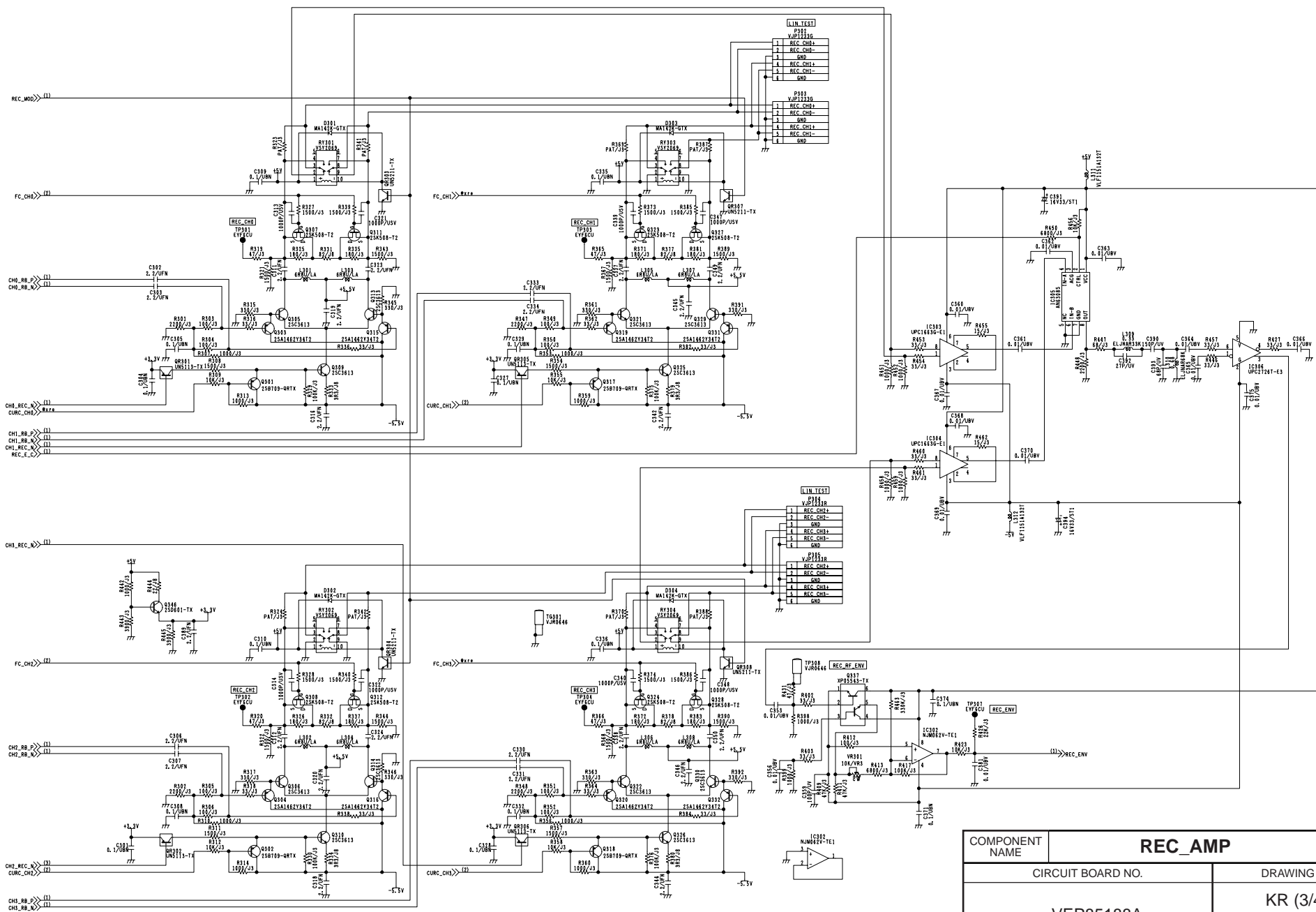
COMPONENT NAME	S-MOTHER		08/08
CIRCUIT BOARD NO.		DRAWING NO.	
VEP89137A		KR9G58 (8/8)	
		SCM209	



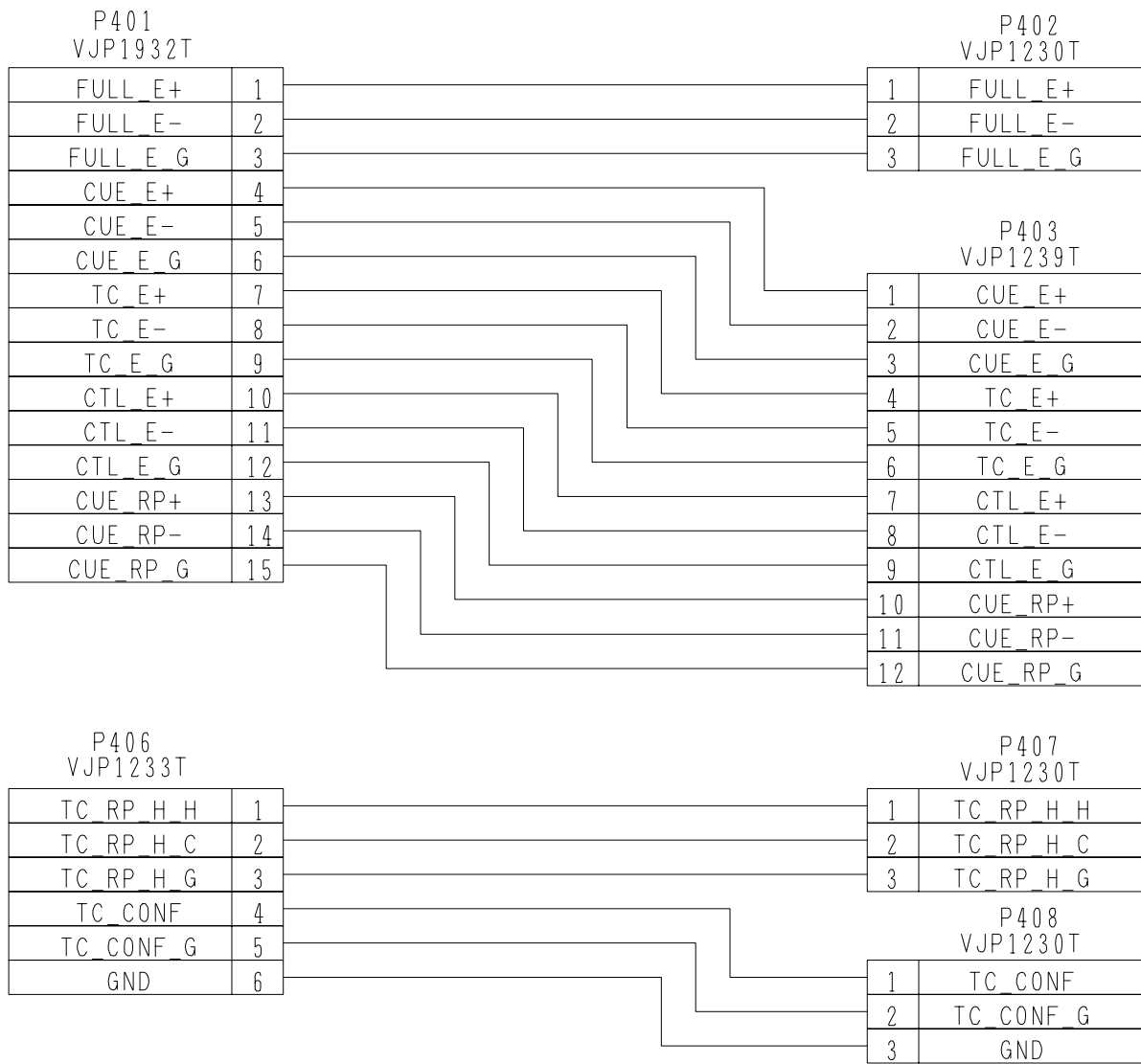
COMPONENT NAME	SUB-MOTHER	01/01
CIRCUIT BOARD NO.	VEP89138A:AJ-HD3700HP	DRAWING NO.
	VEP89138B:AJ-HD3700HE	KR9G60 (1/1)
		SCM210



COMPONENT NAME	REC_AMP	02/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP85188A	KR (2/4)	
	SCM212	



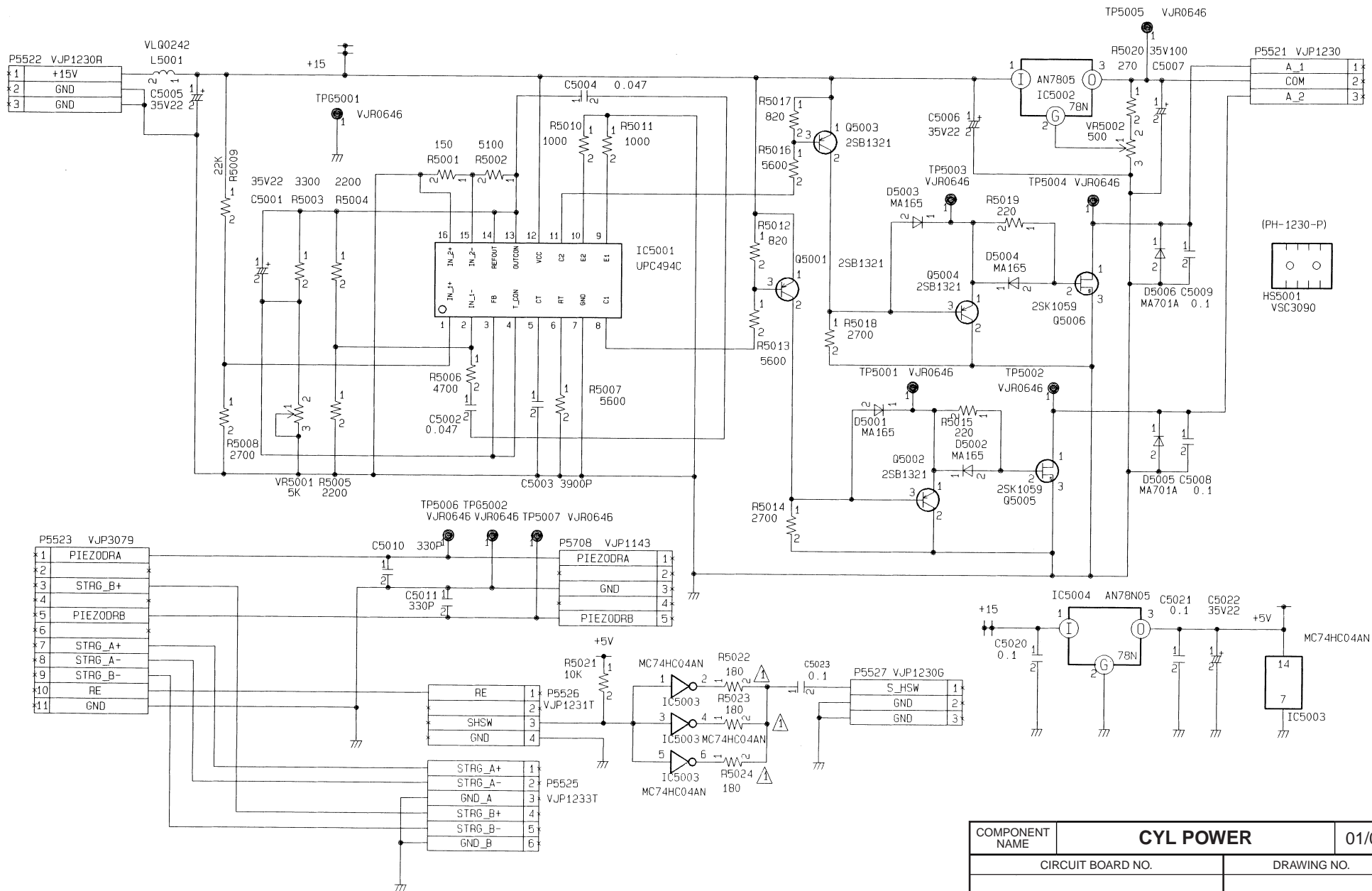
COMPONENT NAME	REC_AMP		03/04
CIRCUIT BOARD NO.		DRAWING NO.	
VEP85188A		KR (3/4)	
		SCM213	



Ref No. 400 Series.

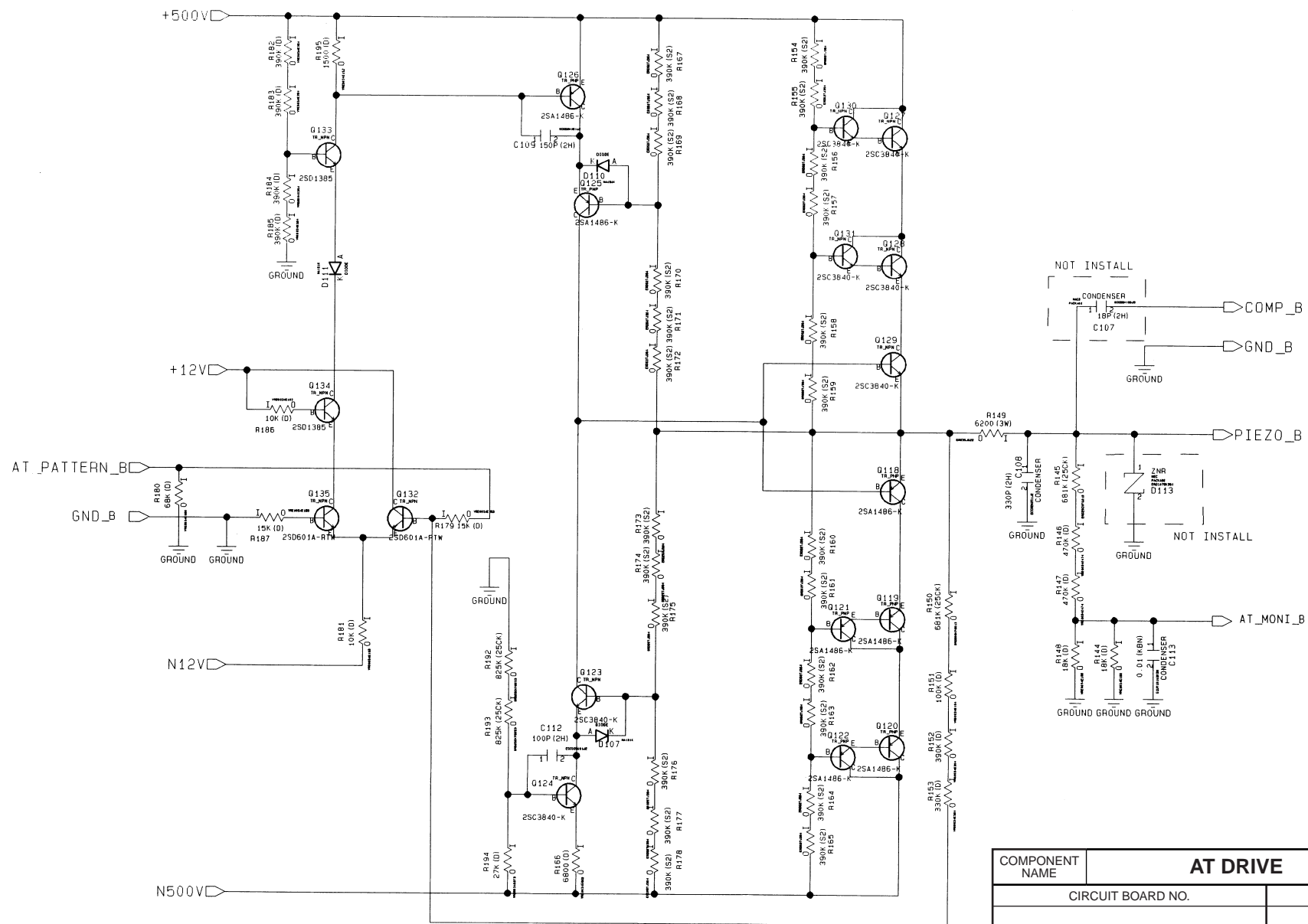
COMPONENT NAME	REC_AMP (HEAD_CONN.)	04/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP85188A		KR (4/4)
		SCM214

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



COMPONENT NAME	CYL POWER		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP85040B			
		SCM215	

COMPONENT NAME	AT DRIVE		01/02
CIRCUIT BOARD NO.		DRAWING NO.	
VEP82095A			
		SCM216	



COMPONENT NAME		AT DRIVE		02/02
CIRCUIT BOARD NO.		DRAWING NO.		
VEP82095A				
		SCM217		

A

B

C

D

E

F

G

H

I

J

1

2

3

4

5

6

7

8

9

10

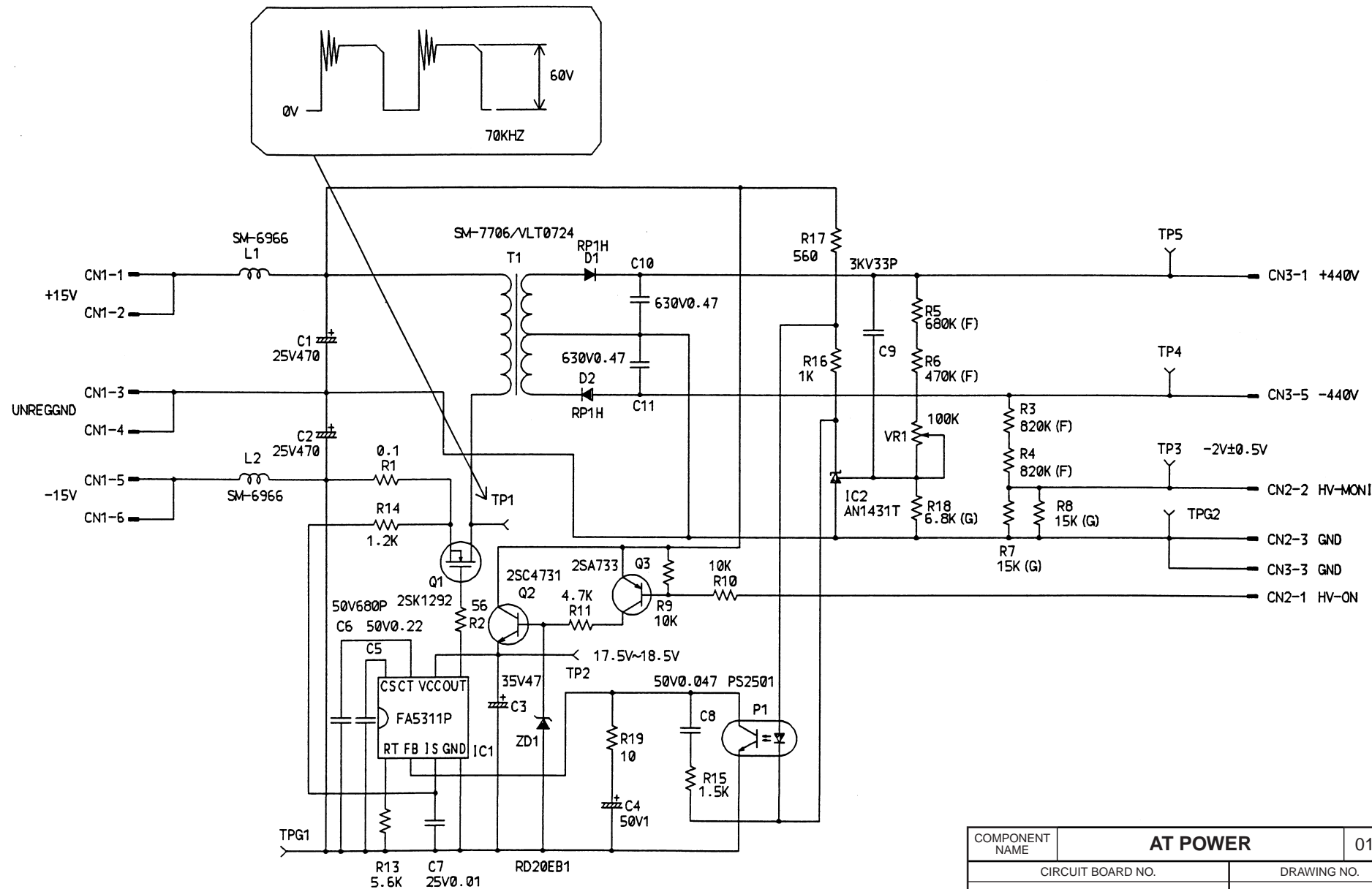
11

12

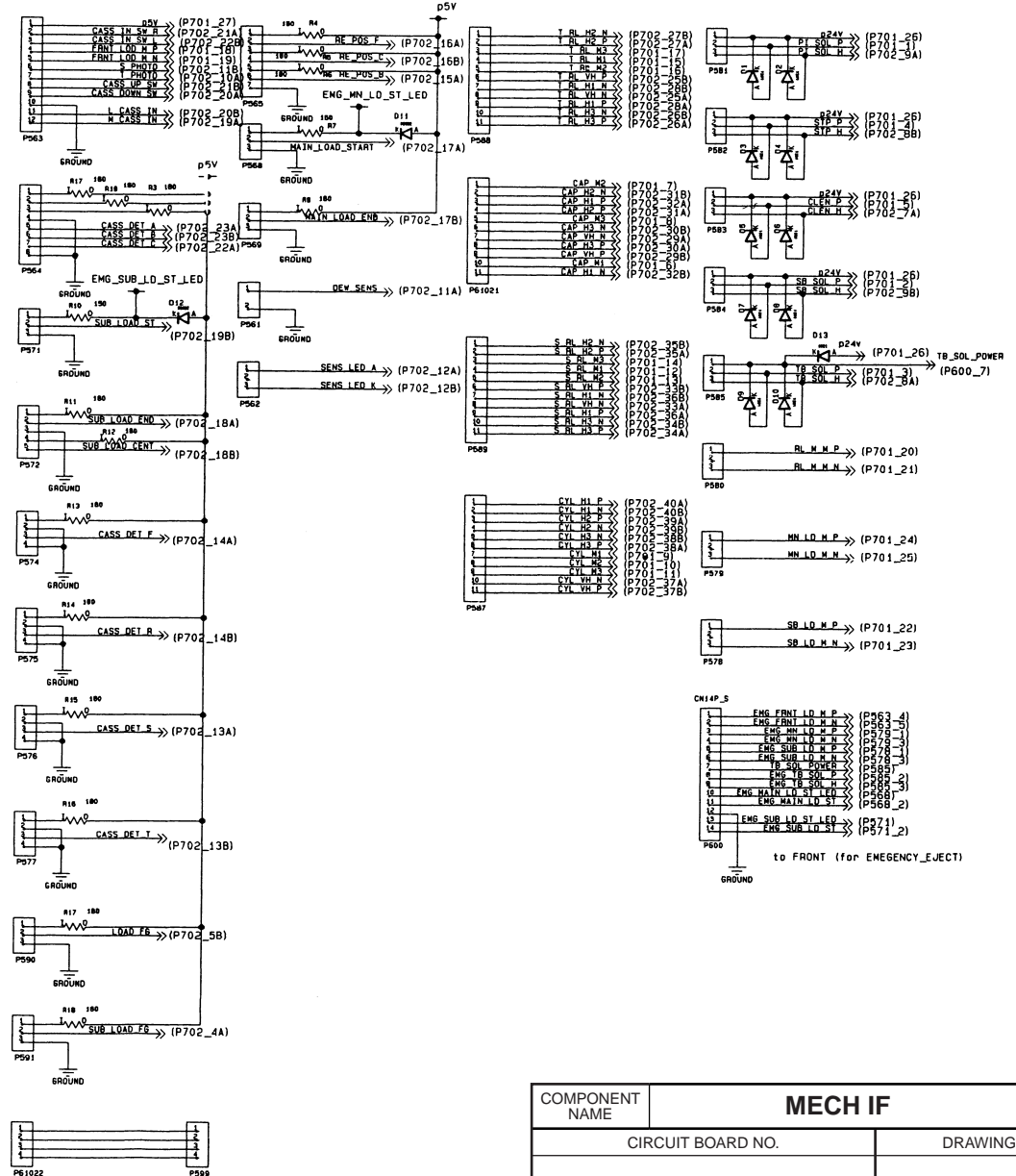
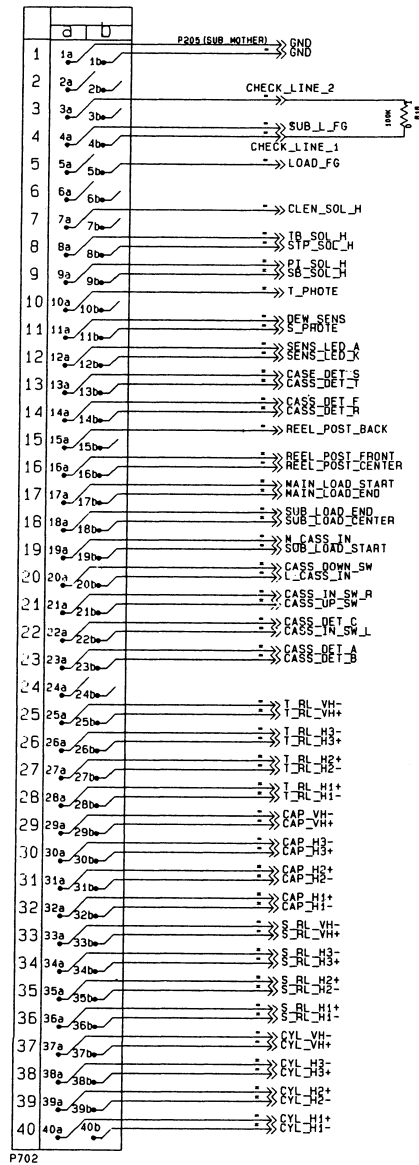
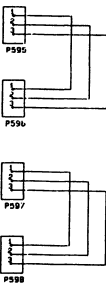
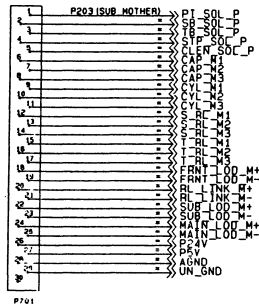
13

14

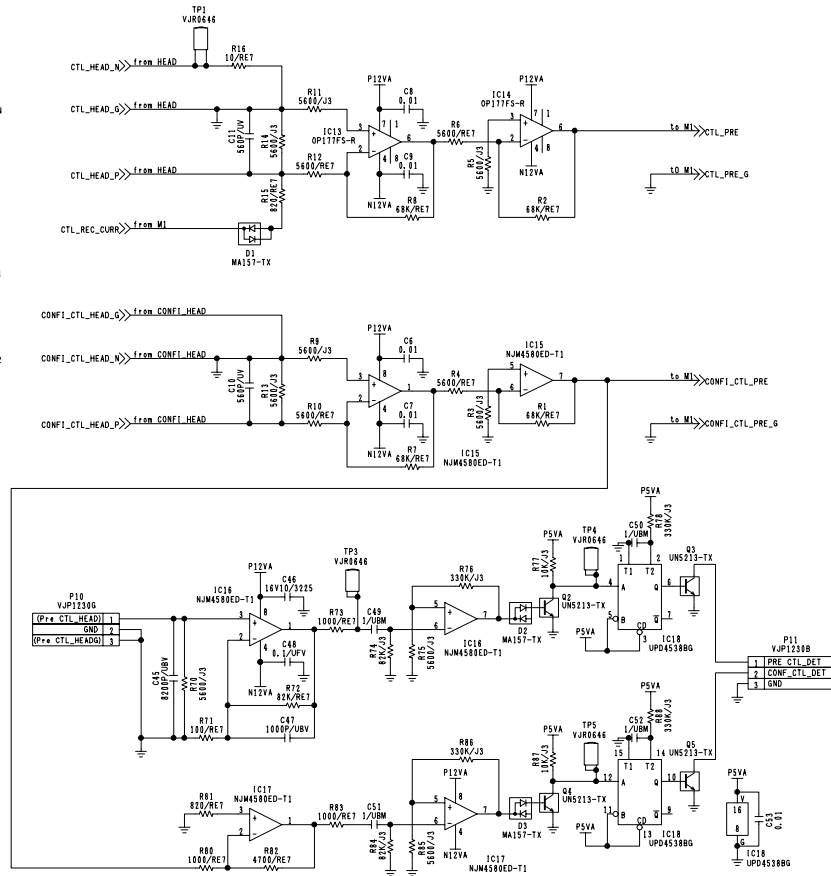
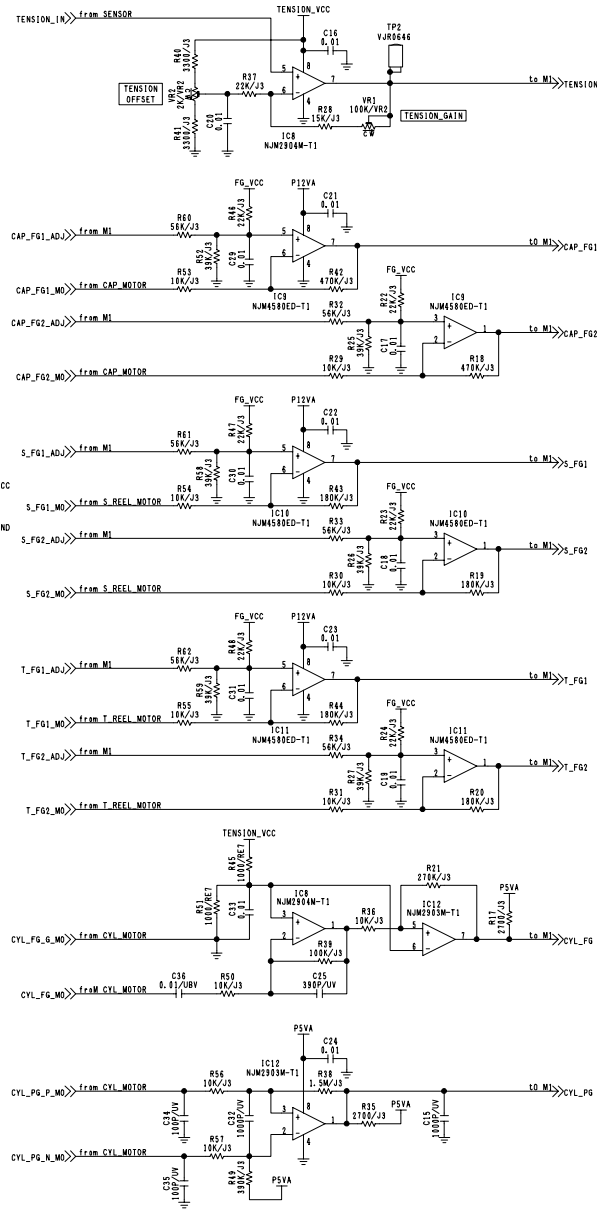
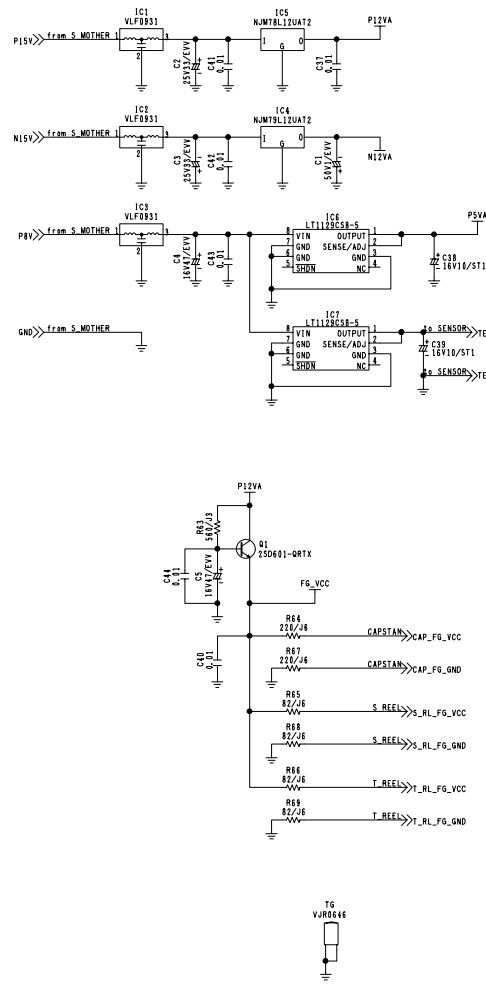
15



COMPONENT NAME	AT POWER		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP82096A			
		SCM218	

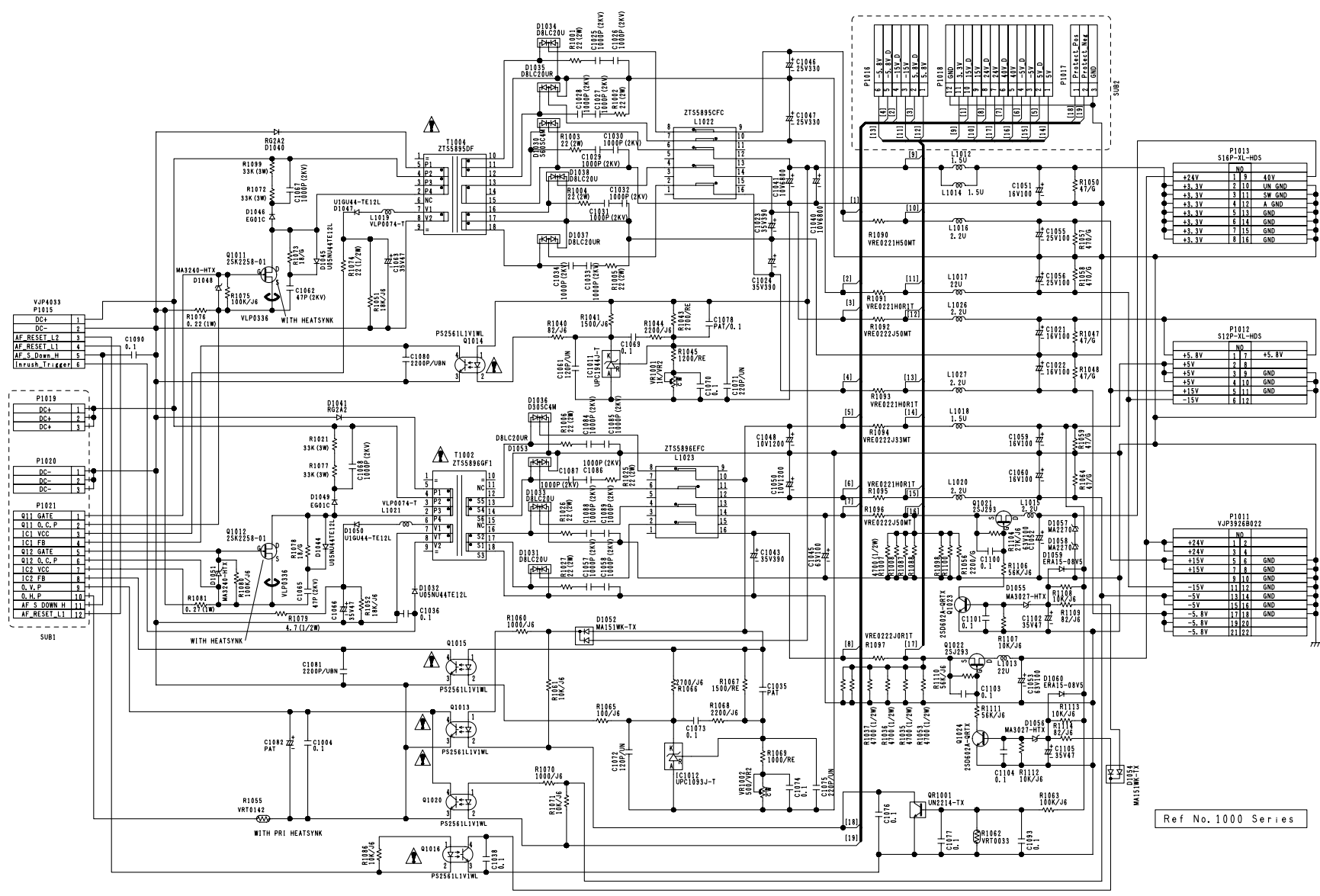


COMPONENT NAME	MECH IF	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80788A	SCM219	



P8 VJP1230T	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
N15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P8V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
GND	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
N15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P8V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
GND	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
N15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P8V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
GND	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
N15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P8V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
GND	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
N15V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
P8V	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND
GND	S_MOTHER>>P15V	S_MOTHER>>N15V	S_MOTHER>>P8V	S_MOTHER>>GND

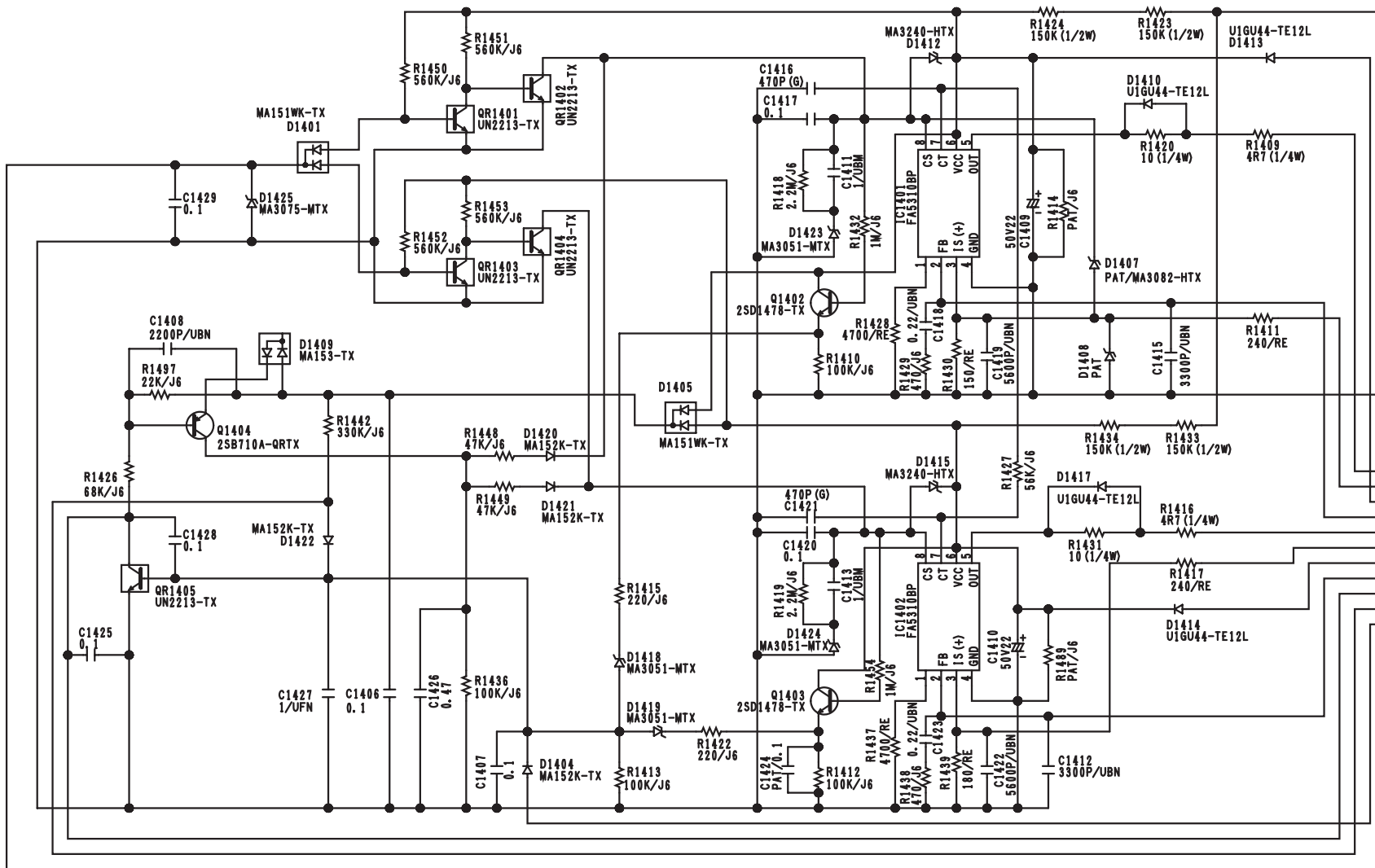
COMPONENT NAME	SERVO CNTL	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82234A	KR2D66(1/1)	
	SCM220	



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK△ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

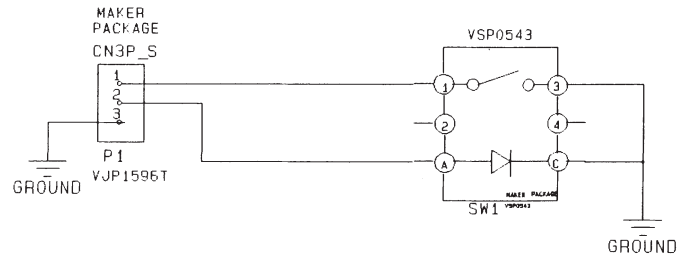
警告 △印の部品は安全上重要な部品です。
交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

COMPONENT NAME		POWER2	01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP81212A		KR(1/1)	
		SCM225	

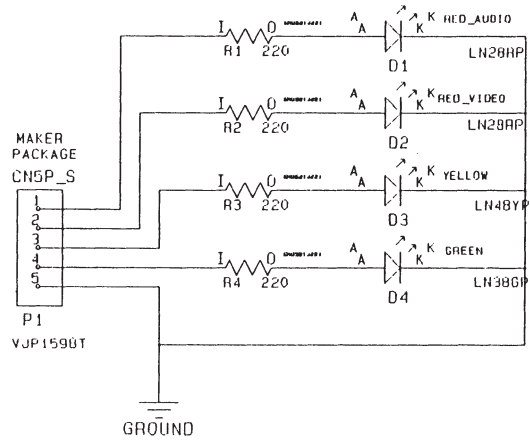


Ref. No. 1400 Series

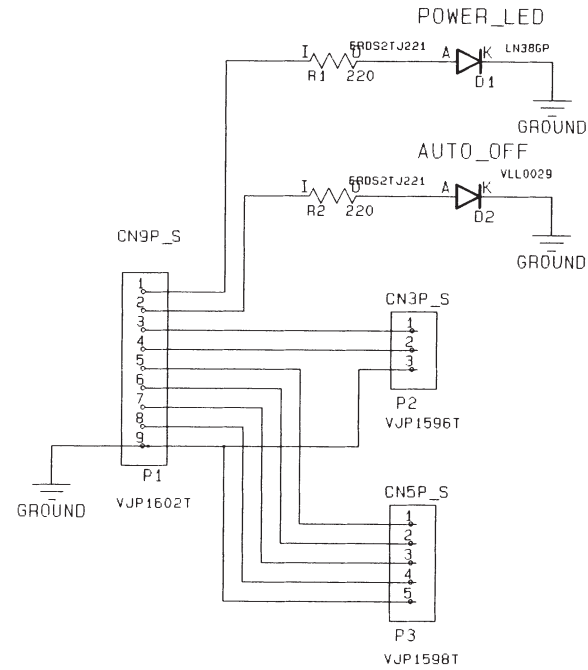
COMPONENT NAME	POWER_SUB_1	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP81213A	KR(1/1)	
	SCM226	



COMPONENT NAME	EJECT	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80790A	SCM228	



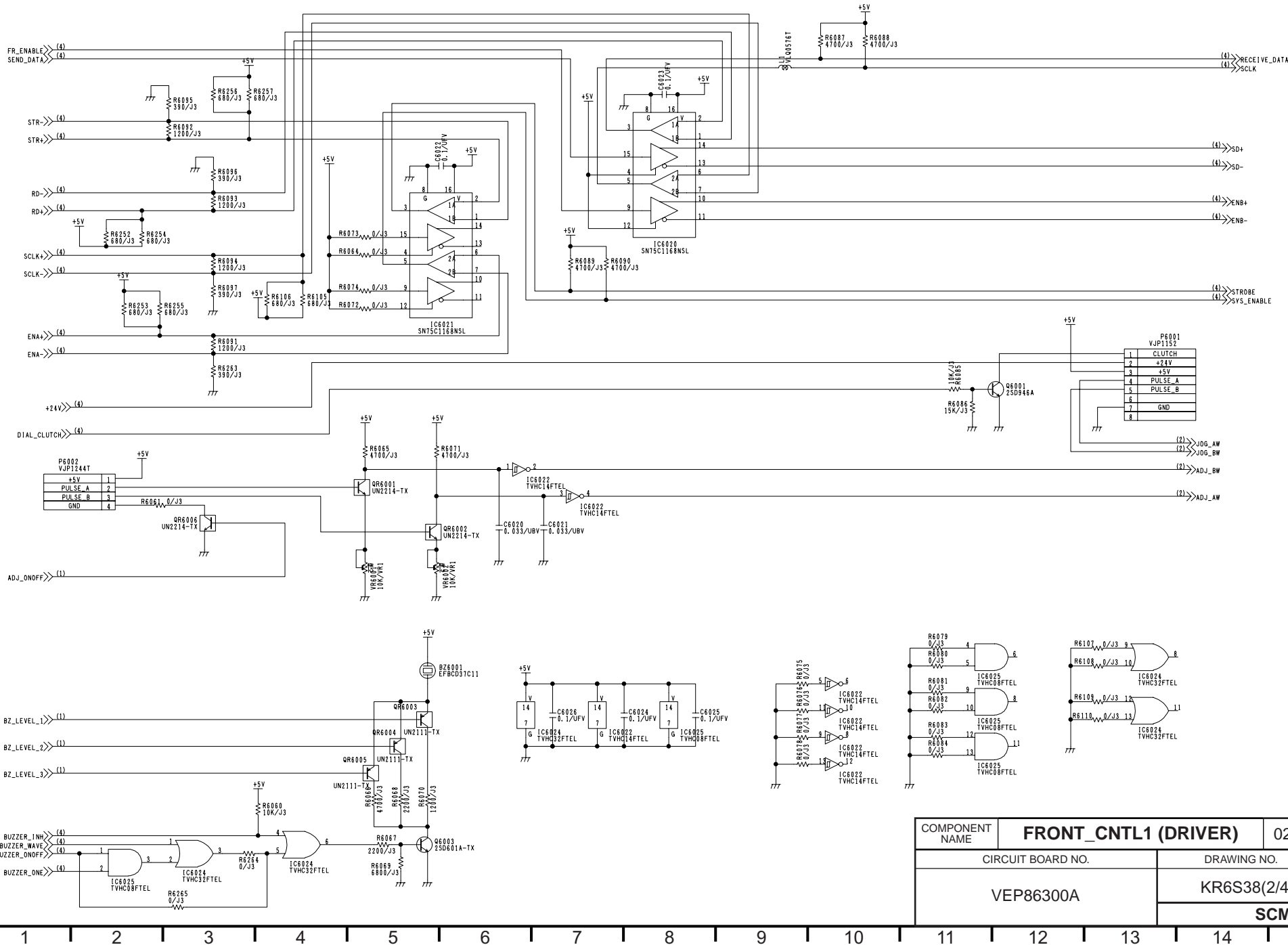
COMPONENT NAME	EFFOR LED	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80804A	SCM228	

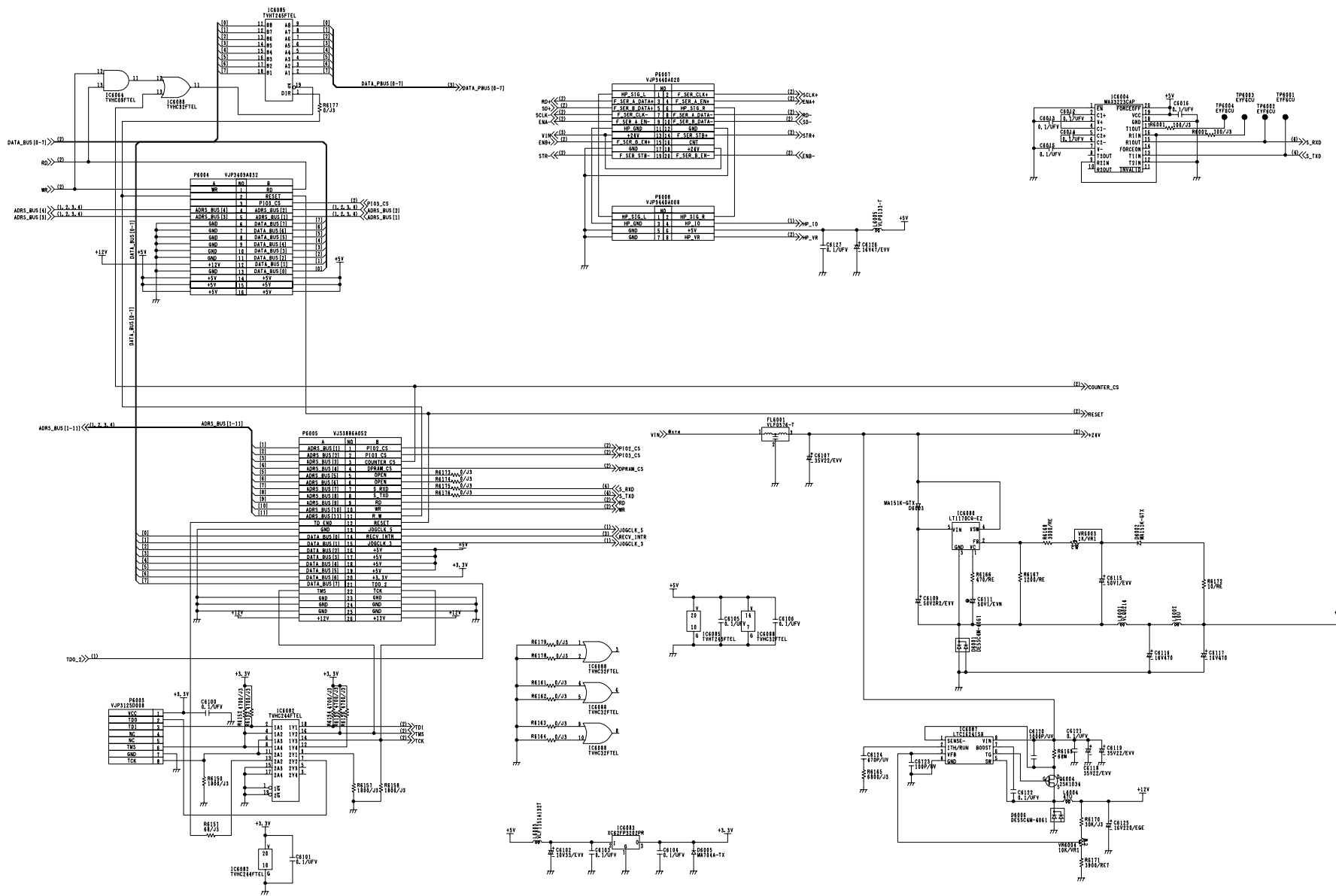


COMPONENT NAME	AUTO OFF LED	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP70792A	SCM228	

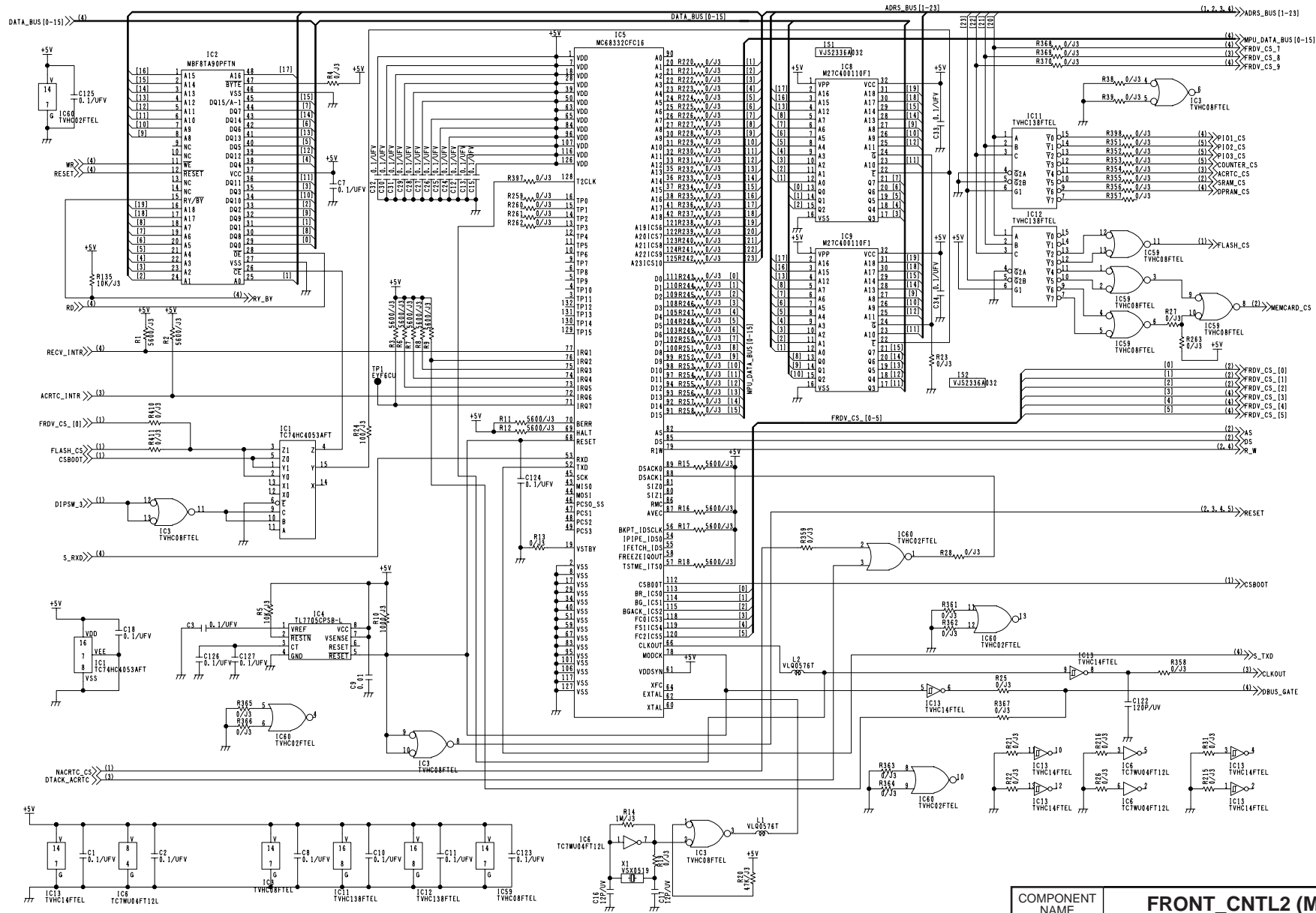
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

A
B
C
D
E
F
G
H
I
J

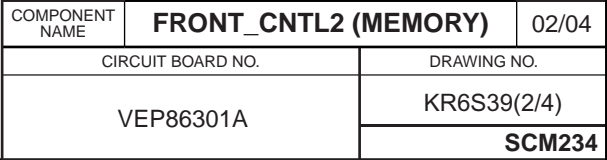


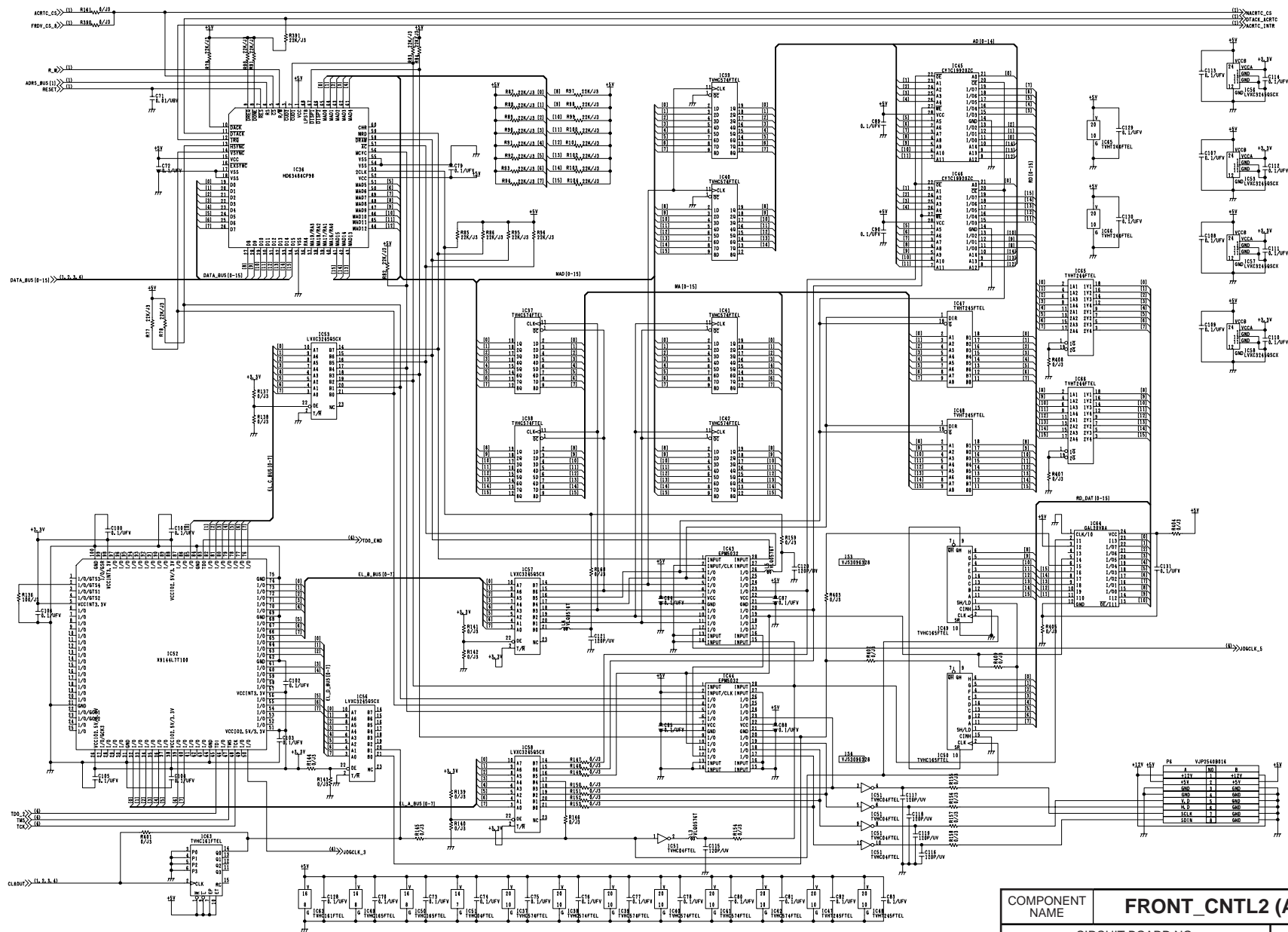


COMPONENT NAME	FRONT_CNTL1 (CONNECTOR)	04/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86300A		KR6S38(4/4)
		SCM232



COMPONENT NAME	FRONT_CNTL2 (MPU)	01/04
CIRCUIT BOARD NO.	VEP86301A	DRAWING NO.
		KR6S39(1/4)
		SCM233





COMPONENT NAME	FRONT_CNTL2 (ACRTC)	03/04
CIRCUIT BOARD NO.	VEP86301A	DRAWING NO.
		KR6S39(3/4)
		SCM235

A

B

C

D

E

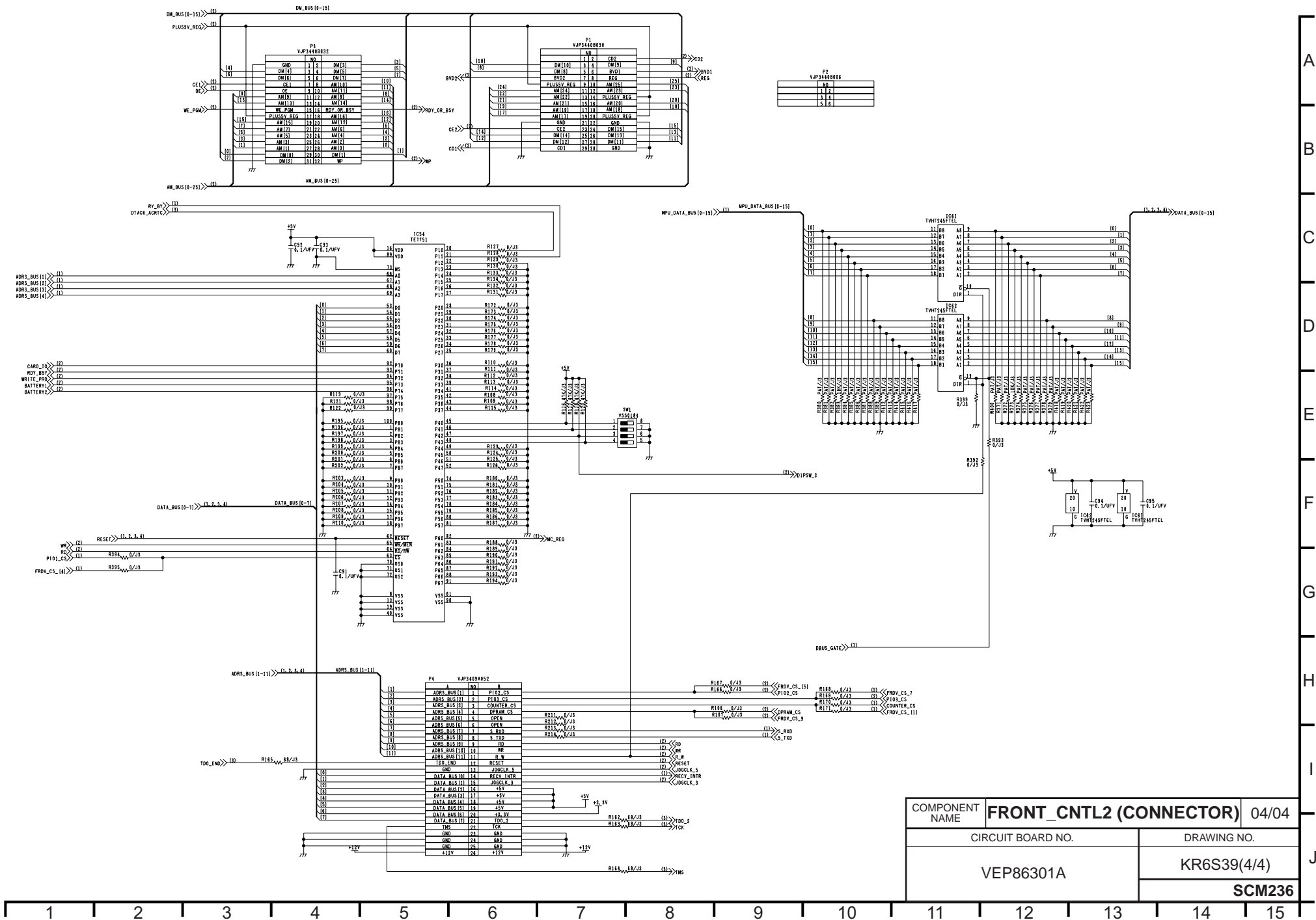
F

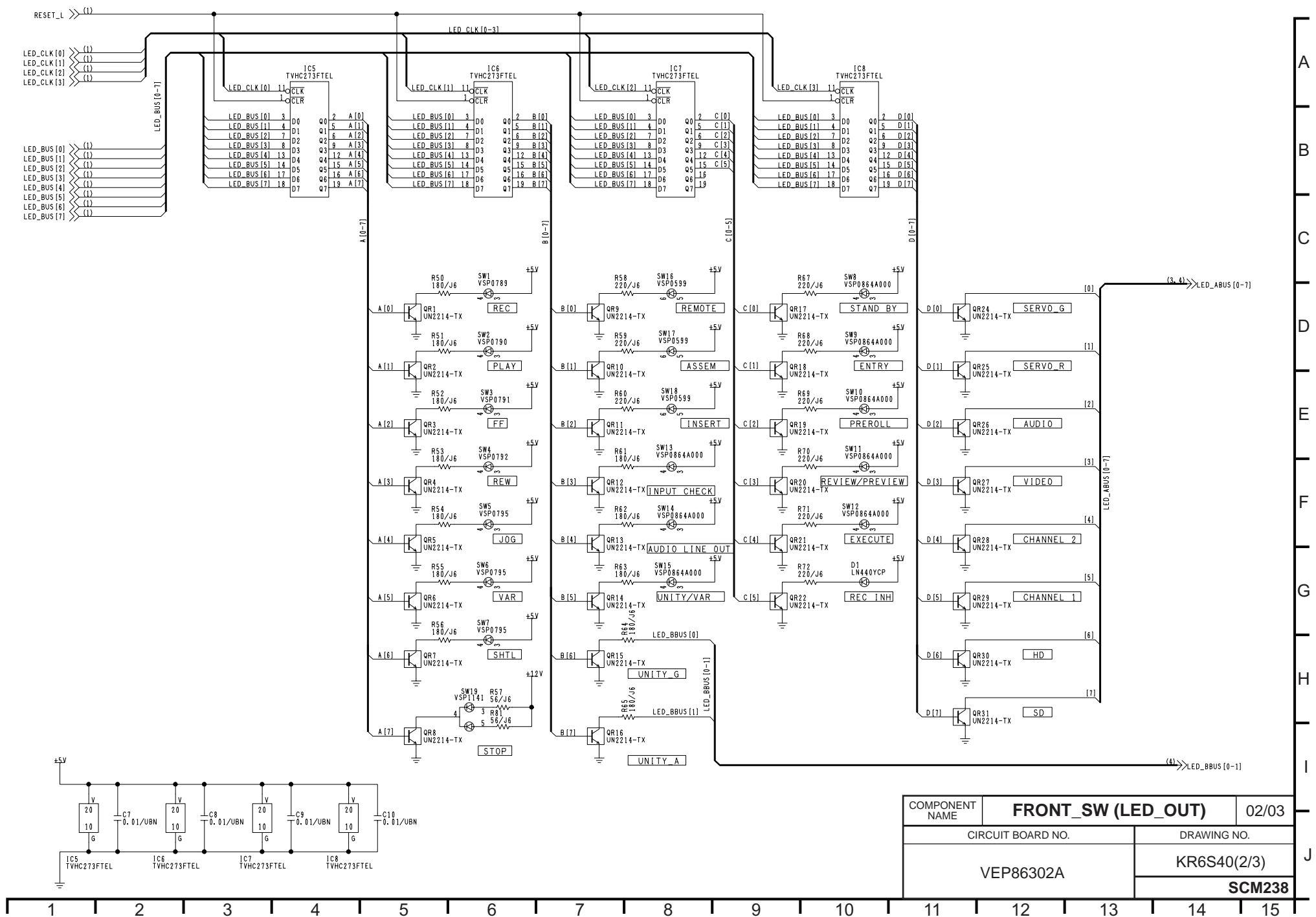
G

H

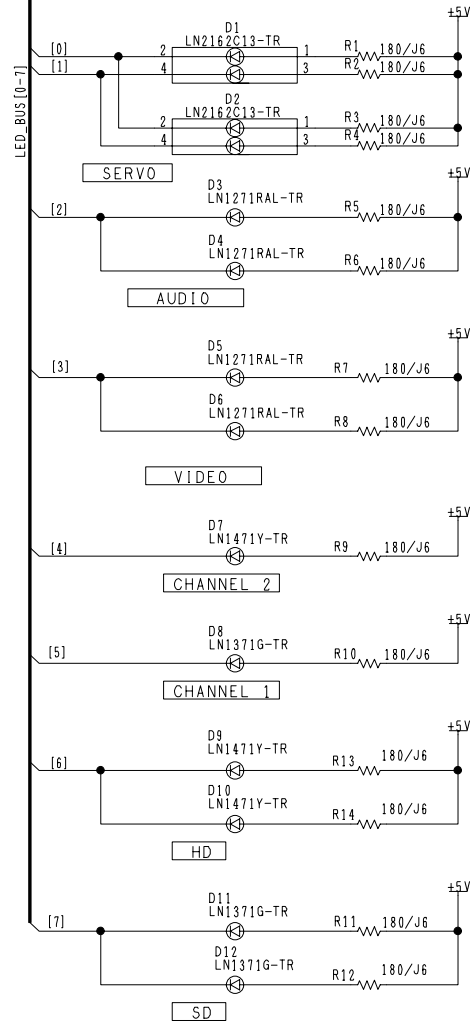
I

J

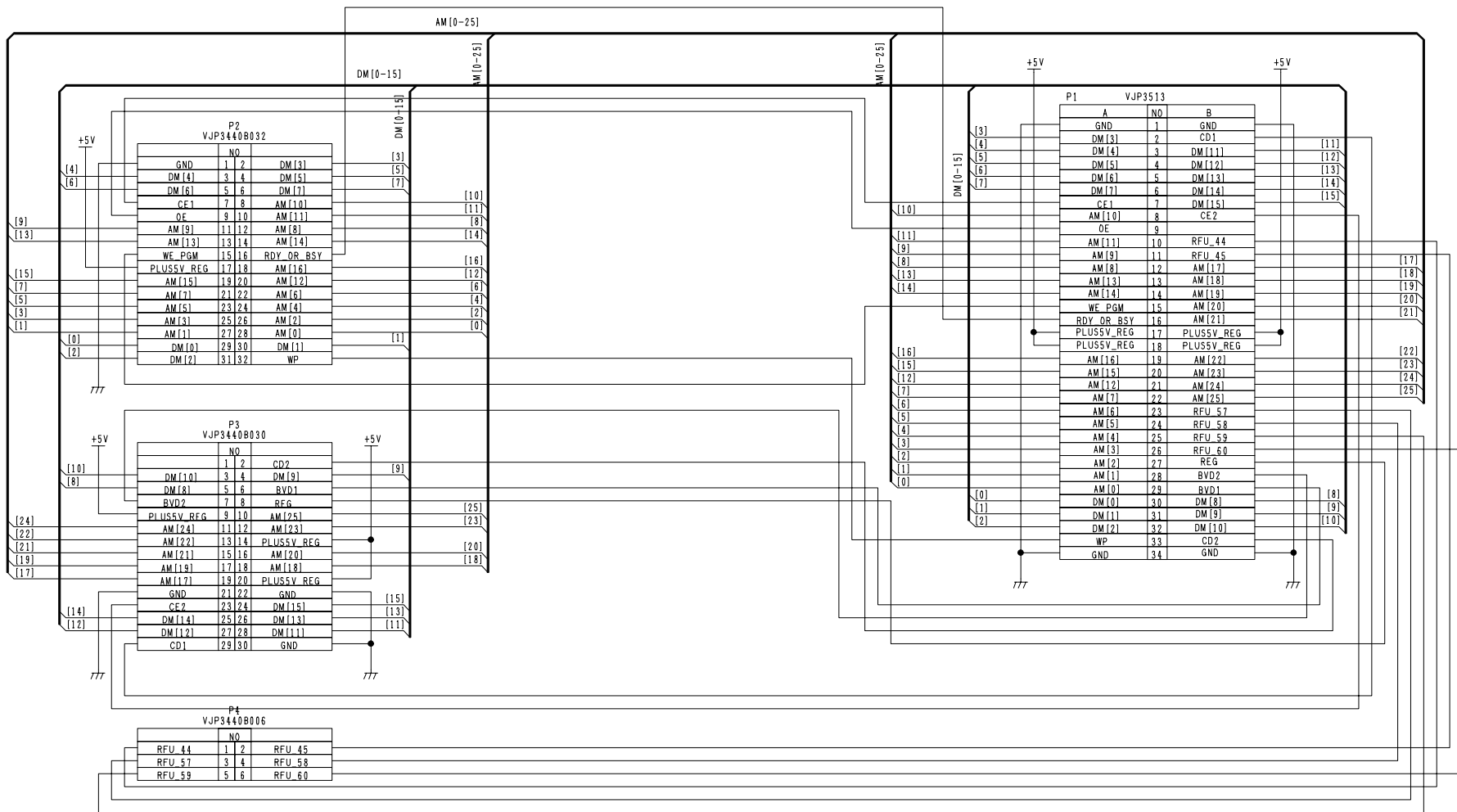




P1		
VJP3950A012D		
+5V	1	
+5V	2	
LED_BUS[0]	3	[0]
LED_BUS[1]	4	[1]
LED_BUS[2]	5	[2]
LED_BUS[3]	6	[3]
LED_BUS[4]	7	[4]
LED_BUS[5]	8	[5]
LED_BUS[6]	9	[6]
LED_BUS[7]	10	[7]
+5V	11	
+5V	12	



COMPONENT NAME	FR_LED	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP86306A		KR6S83(1/1)
		SCM240



J1

COMPONENT NAME	MEM_CARD_CNCT	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86312A	KR6T33(1/1)	
	SCM241	

A

B

C

D

E

F

G

H

I

J

1

2

3

4

5

6

7

8

9

10

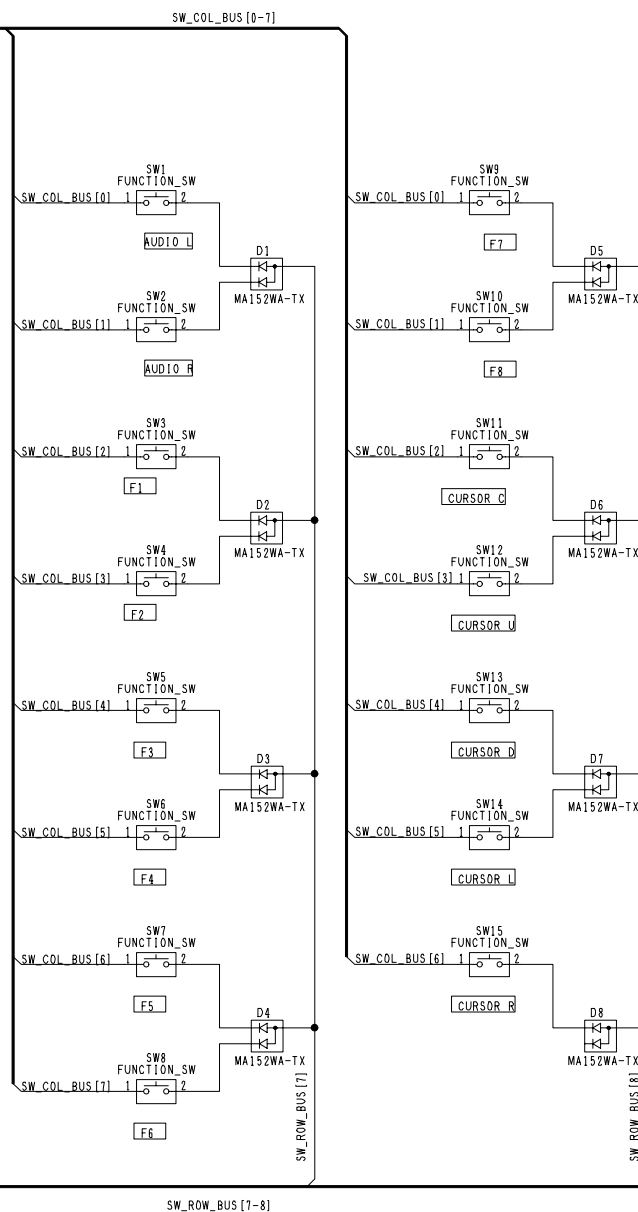
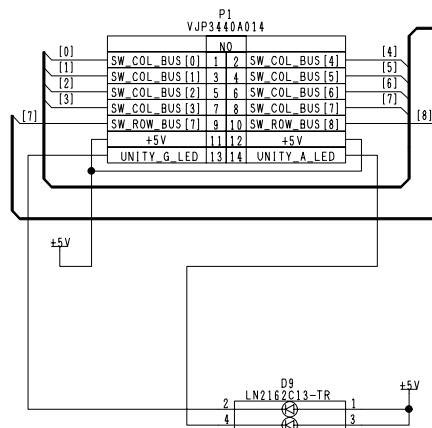
11

12

13

14

15



COMPONENT NAME	FR_FUNCTION	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86305A	KR6S82(1/1)	
	SCM242	

A

B

C

D

E

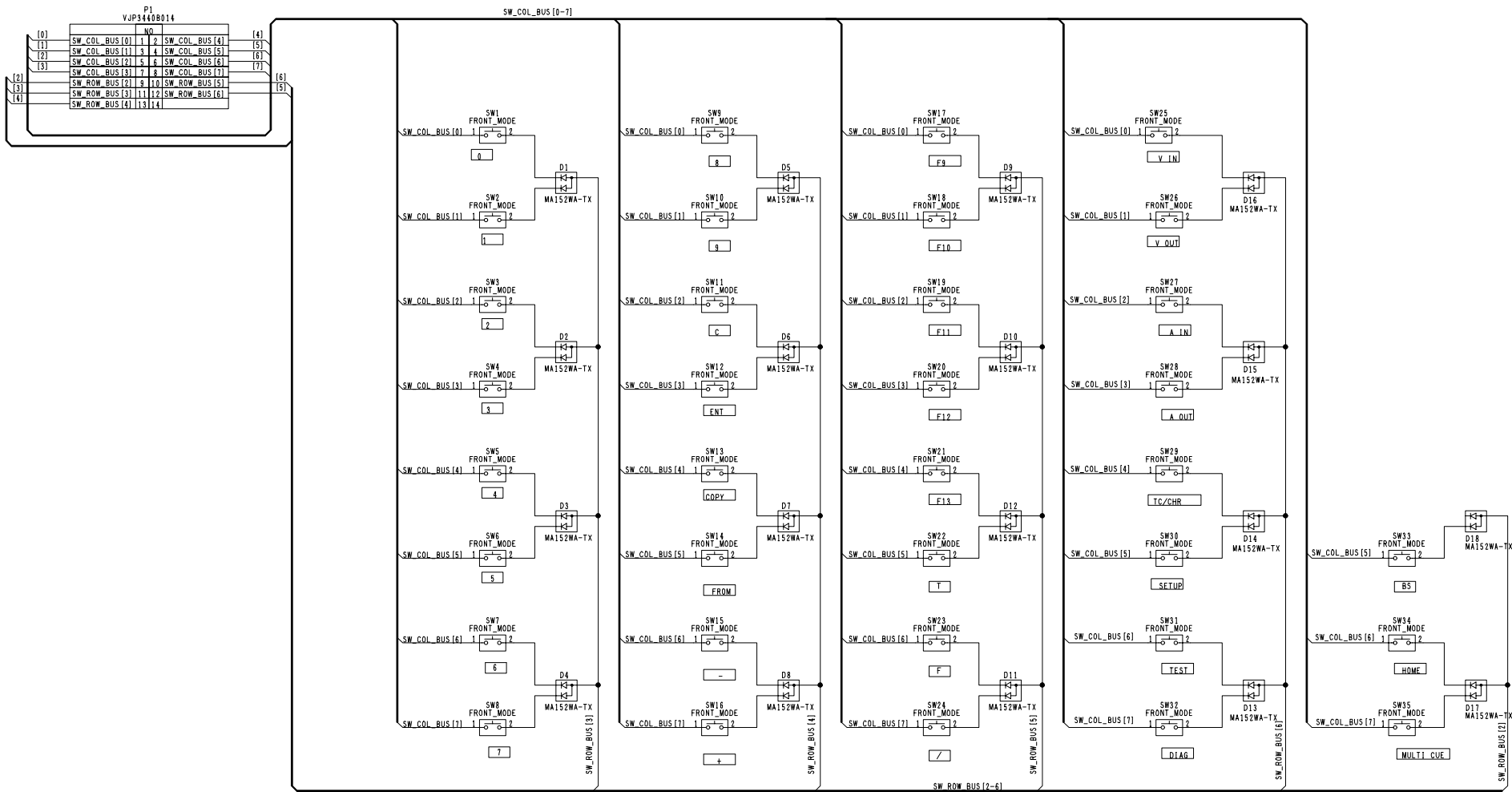
F

G

H

I

J



COMPONENT NAME	FR_MODE		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP86304A		KR6S81(1/1)	
		SCM243	

1

2

3

4

5

6

7

8

9

10

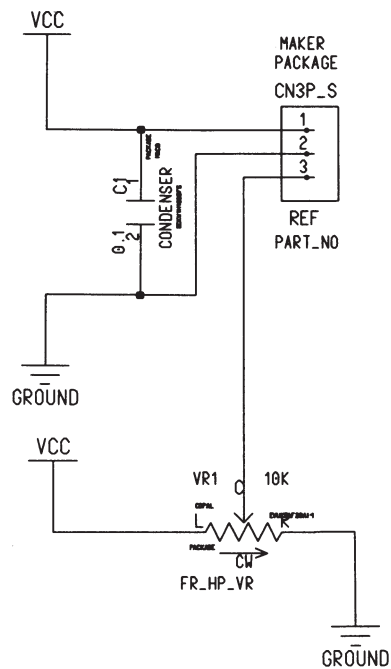
11

12

13

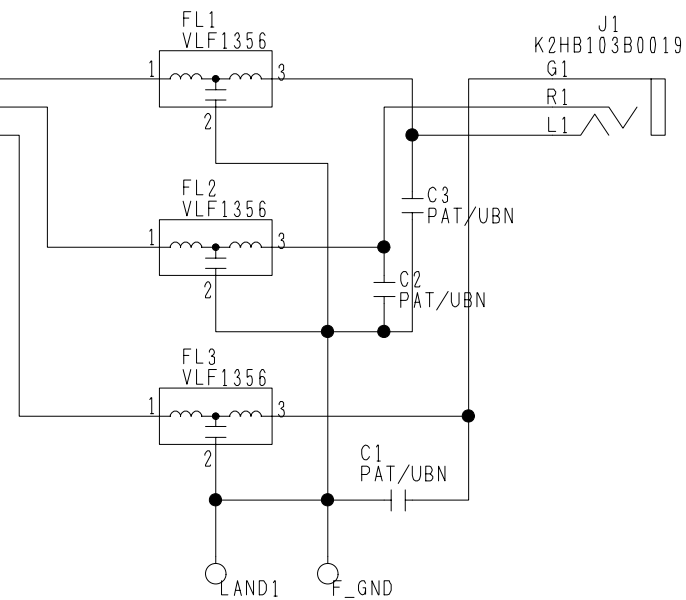
14

15

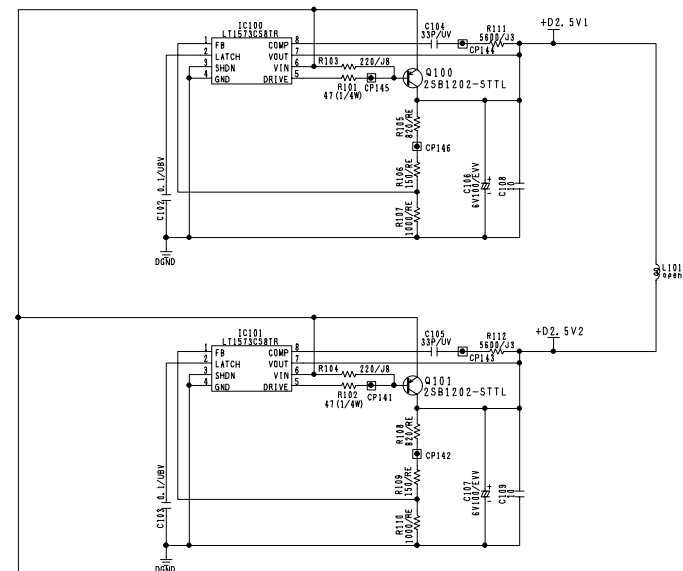
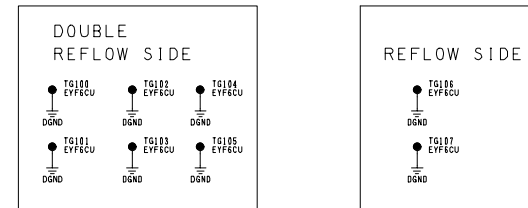
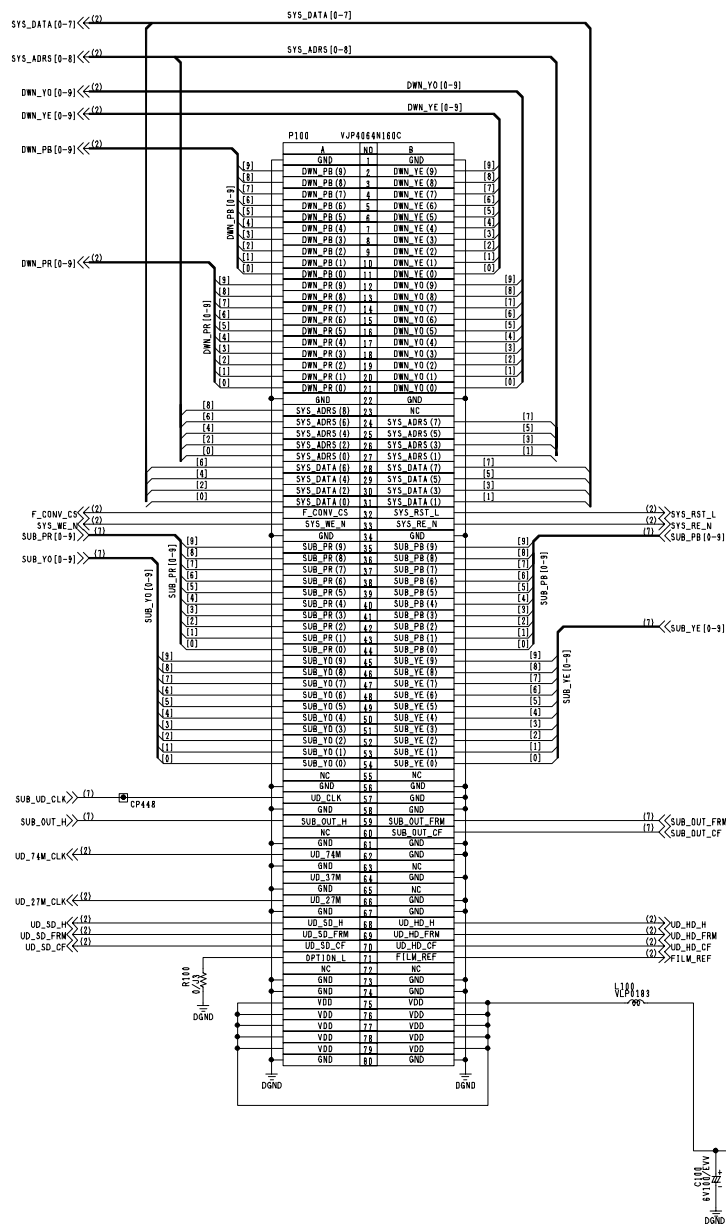


COMPONENT NAME	FR_HP_VR	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86130B		
	SCM243	

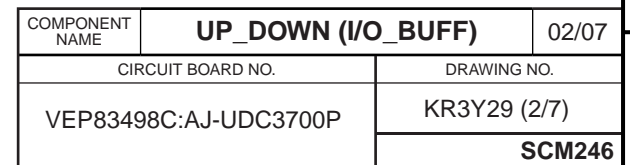
P1	
VJP1232T	
HP_SIG_L	1
HP_SIG_R	2
HP_SIG_G	3
	4
	5

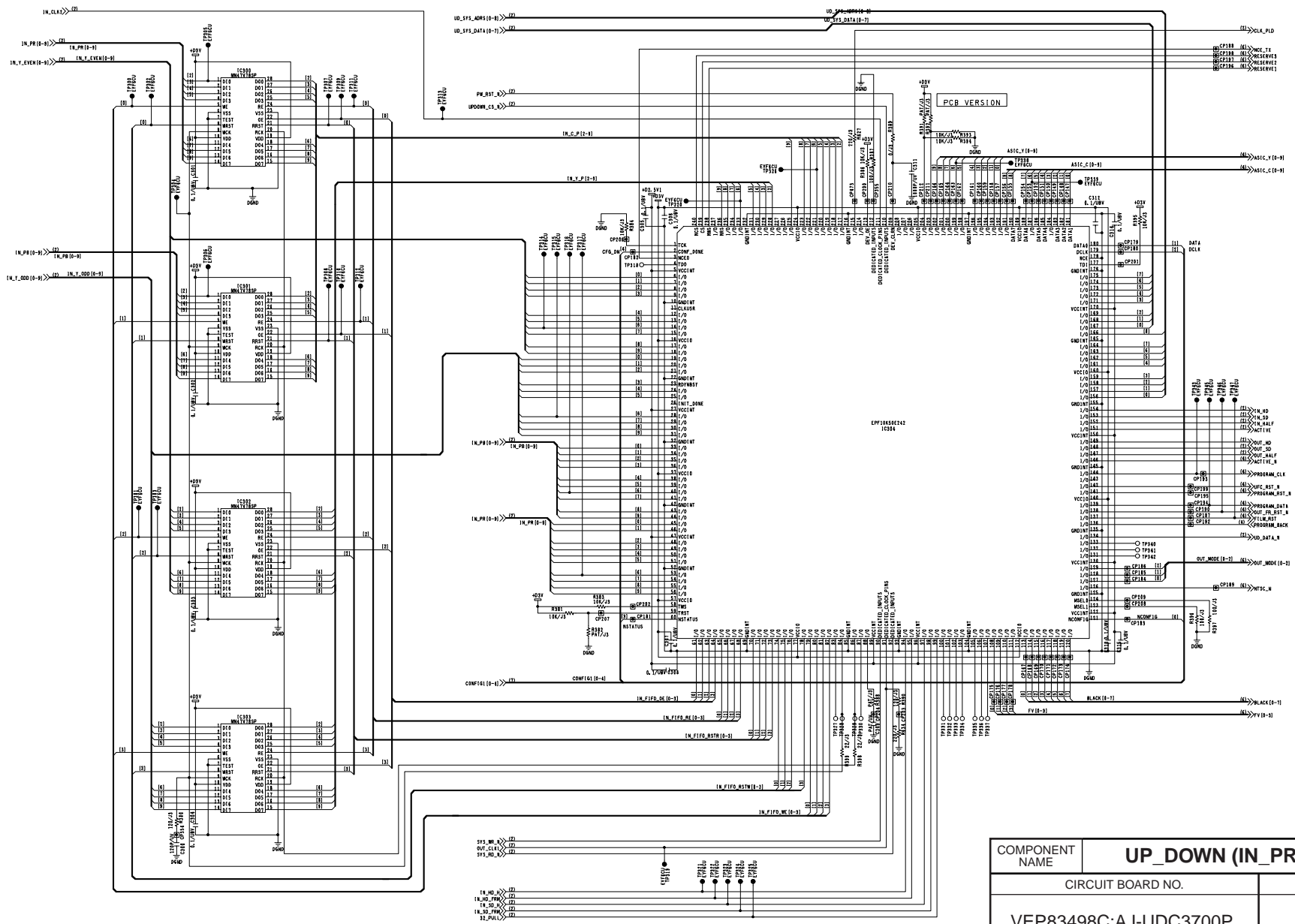


COMPONENT NAME	FR_HP_JACK	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86317A		
	KR6U54(1/1)	
	SCM244	



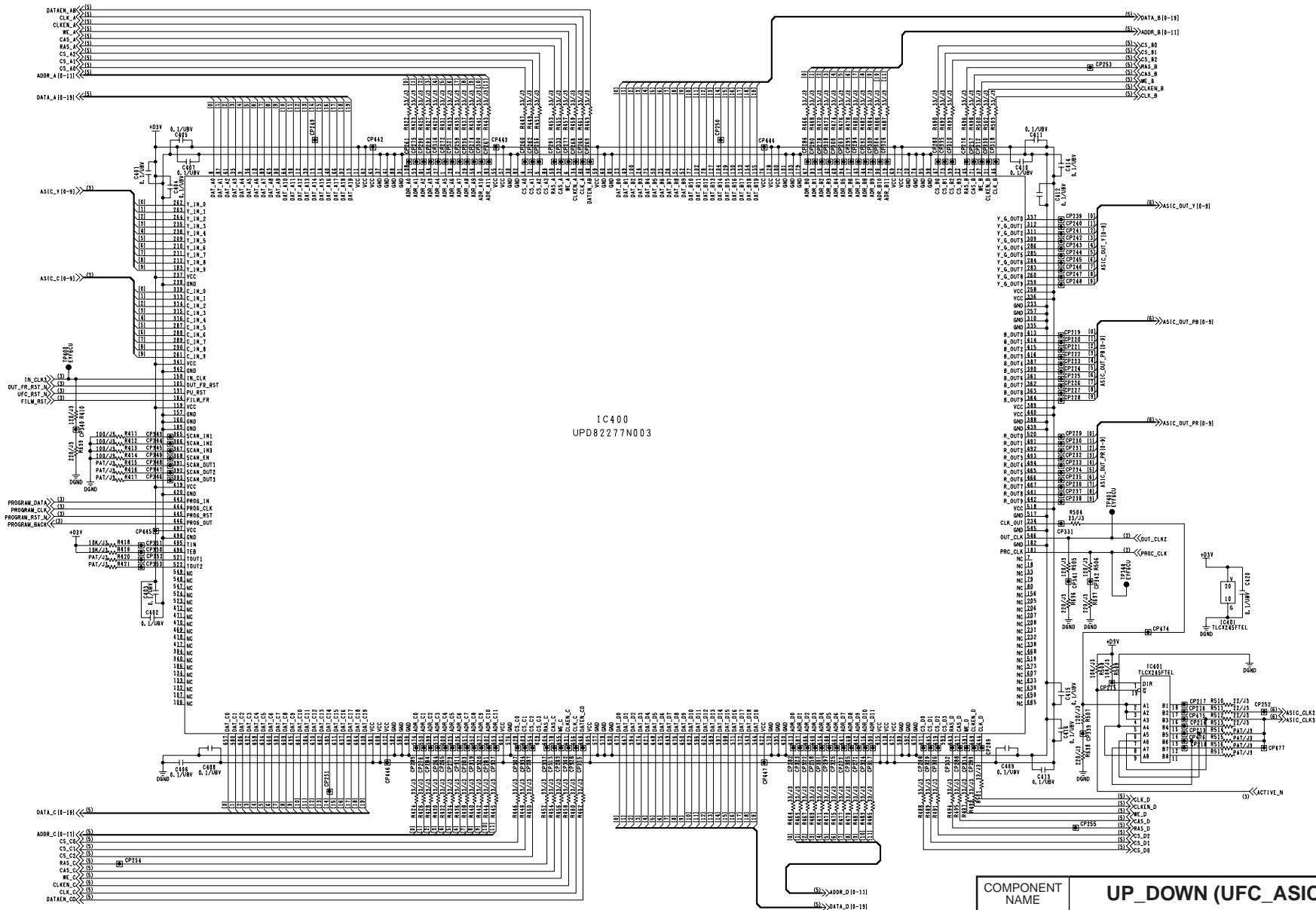
COMPONENT NAME	UP_DOWN (CONNECTOR)		01/07
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83498C:AJ-UDC3700P		KR3Y29 (1/7)	
		SCM245	



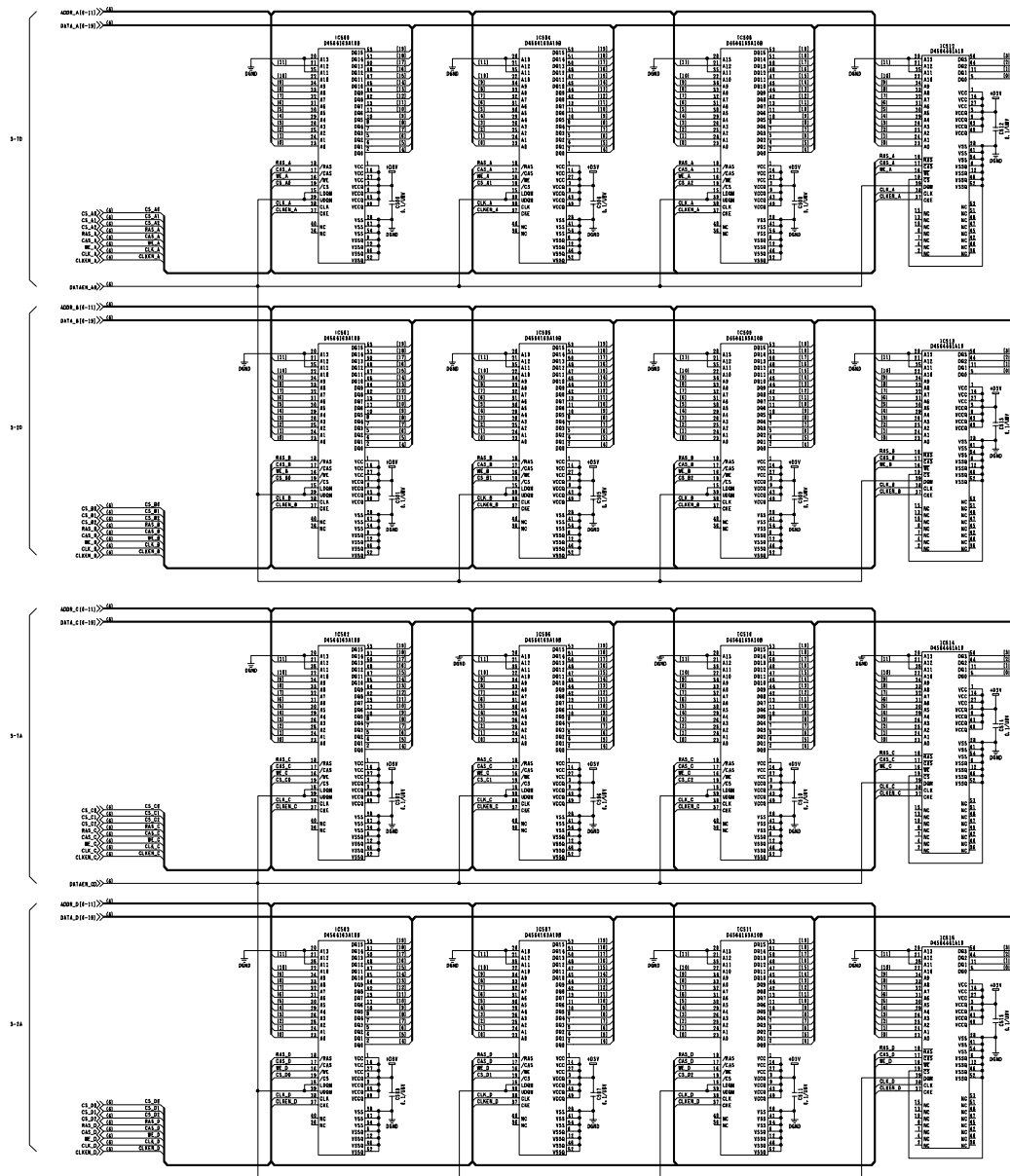


COMPONENT NAME	UP_DOWN (IN_PROC)		03/07
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83498C:AJ-UDC3700P		KR3Y29 (3/7)	
		SCM247	

A
B
C
D
E
F
G
H
I
J



COMPONENT NAME	UP_DOWN (UFC_ASIC)	04/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP83498C:AJ-UDC3700P		KR3Y29 (4/7)
		SCM248



COMPONENT NAME	UP_DOWN (SDRAM)		05/07
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83498C:AJ-UDC3700P		KR3Y29 (5/7)	
		SCM249	

A

B

C

D

E

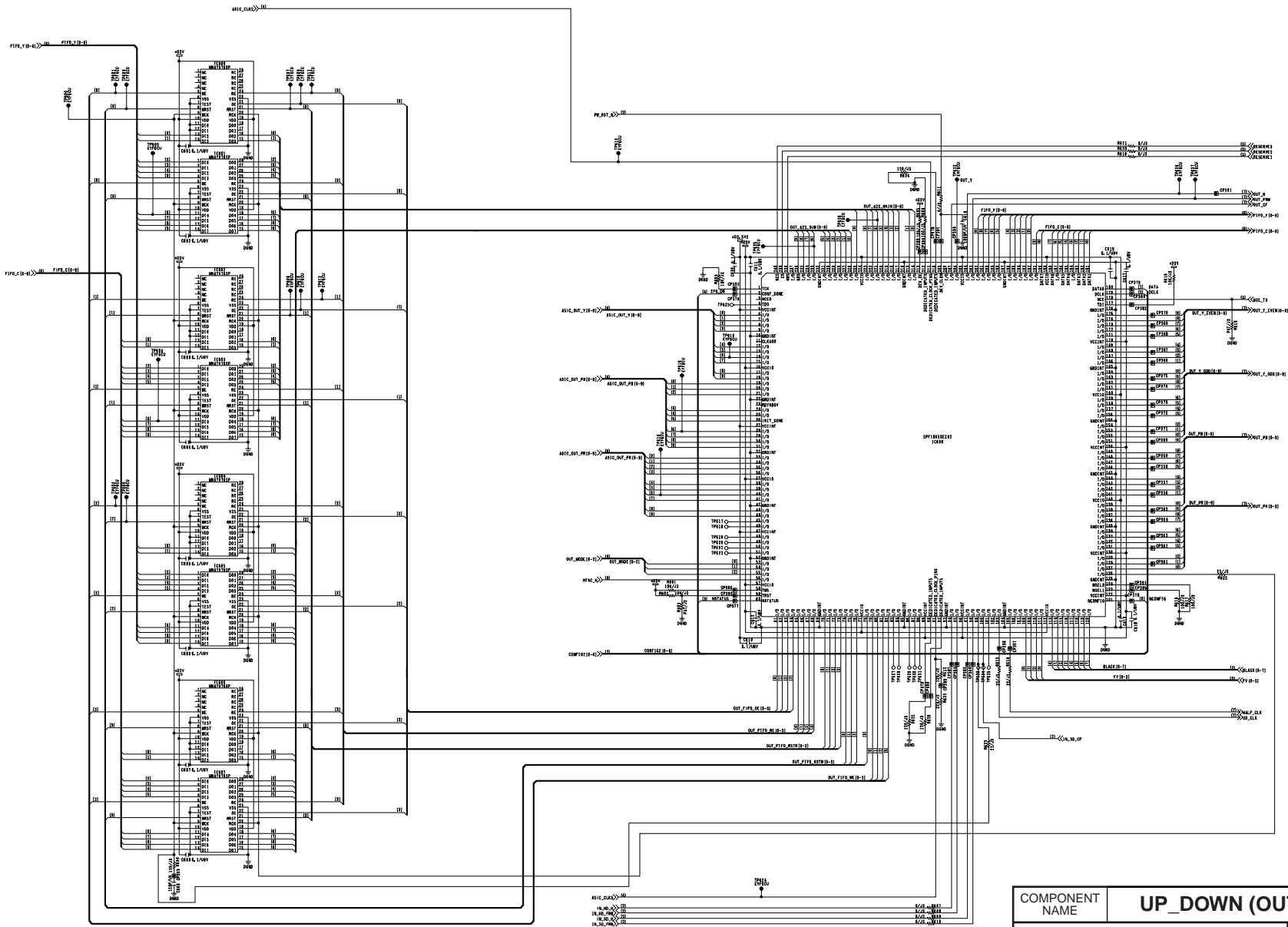
F

G

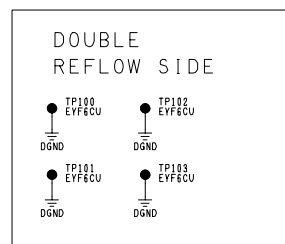
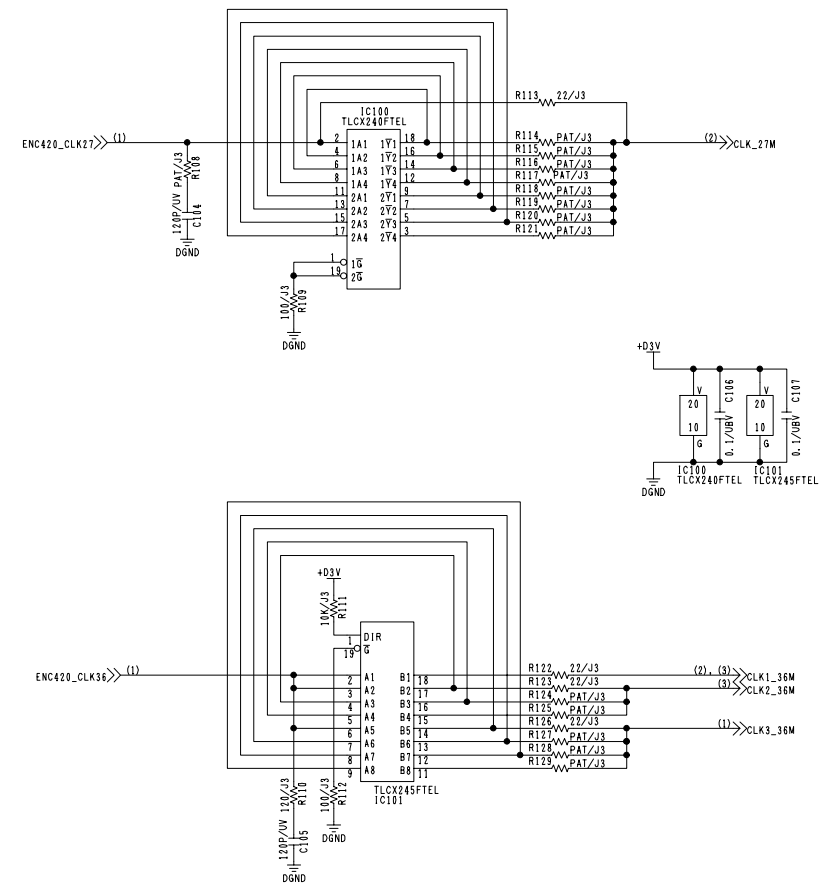
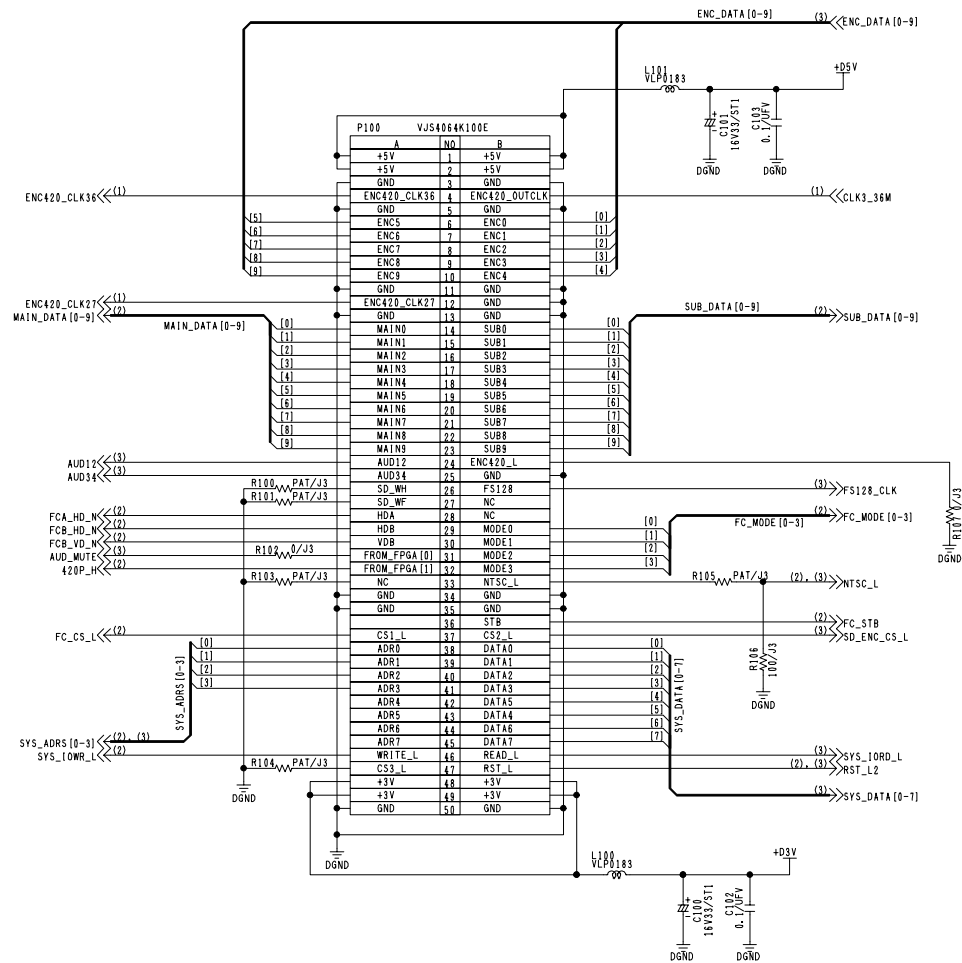
H

I

J

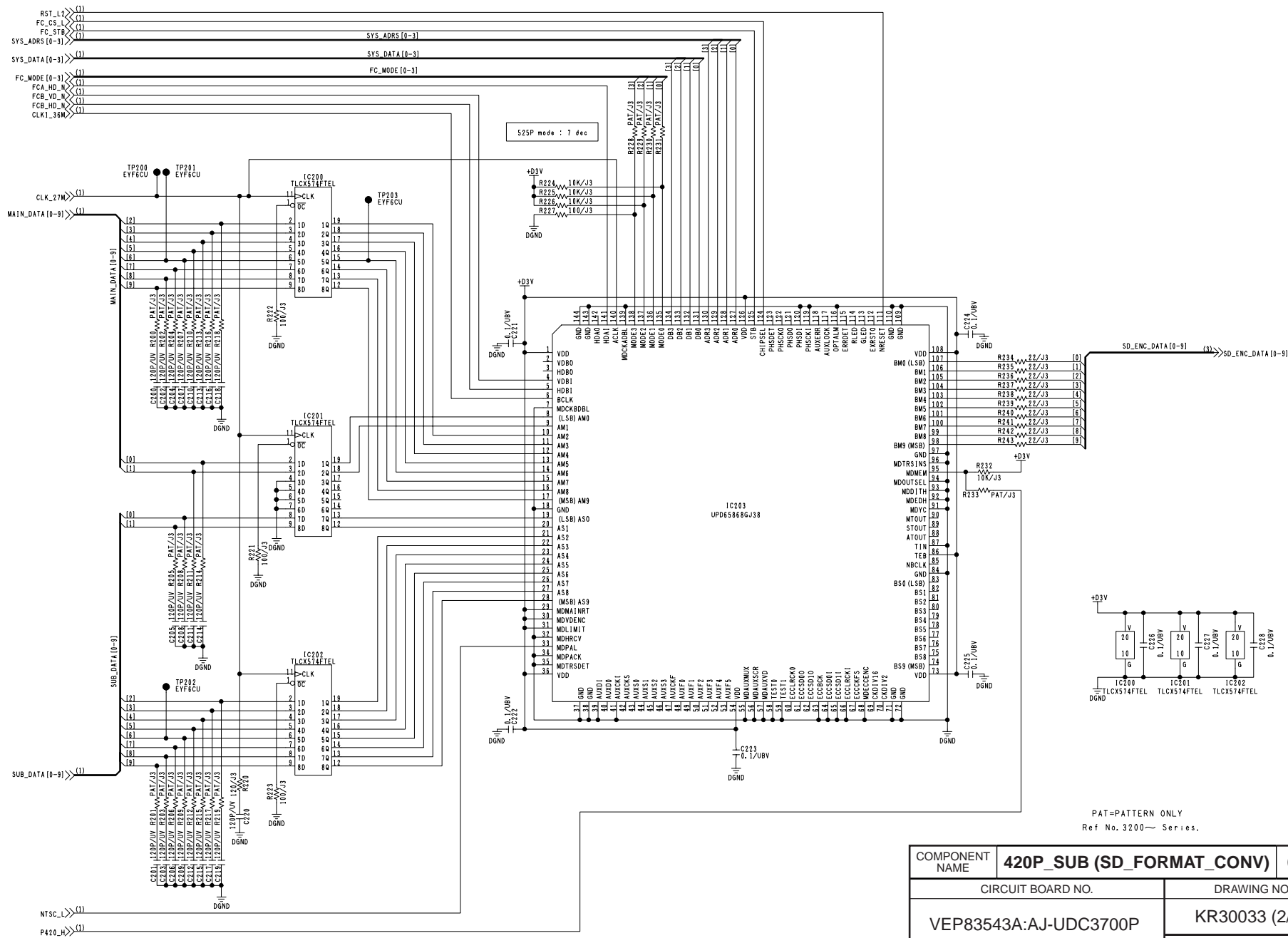


COMPONENT NAME	UP_DOWN (OUT_PROC)	06/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP83498C:AJ-UDC3700P		KR3Y29 (6/7)
		SCM250



PAT=PATTERN ONLY
Ref No. 3100 ~ Series.

COMPONENT NAME	420P_SUB (CONNECTOR)		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP83543A:AJ-UDC3700P		KR3Y62 (1/3)	
		SCM252	



PAT=PATTERN ONLY
Ref No.3200~ Series.

A

B

C

D

E

F

G

H

I

J

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15


SECTION 7

CIRCUIT BOARD DIAGRAMS

NOTE:


BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION 8

CAUTION

THE  MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.

PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:

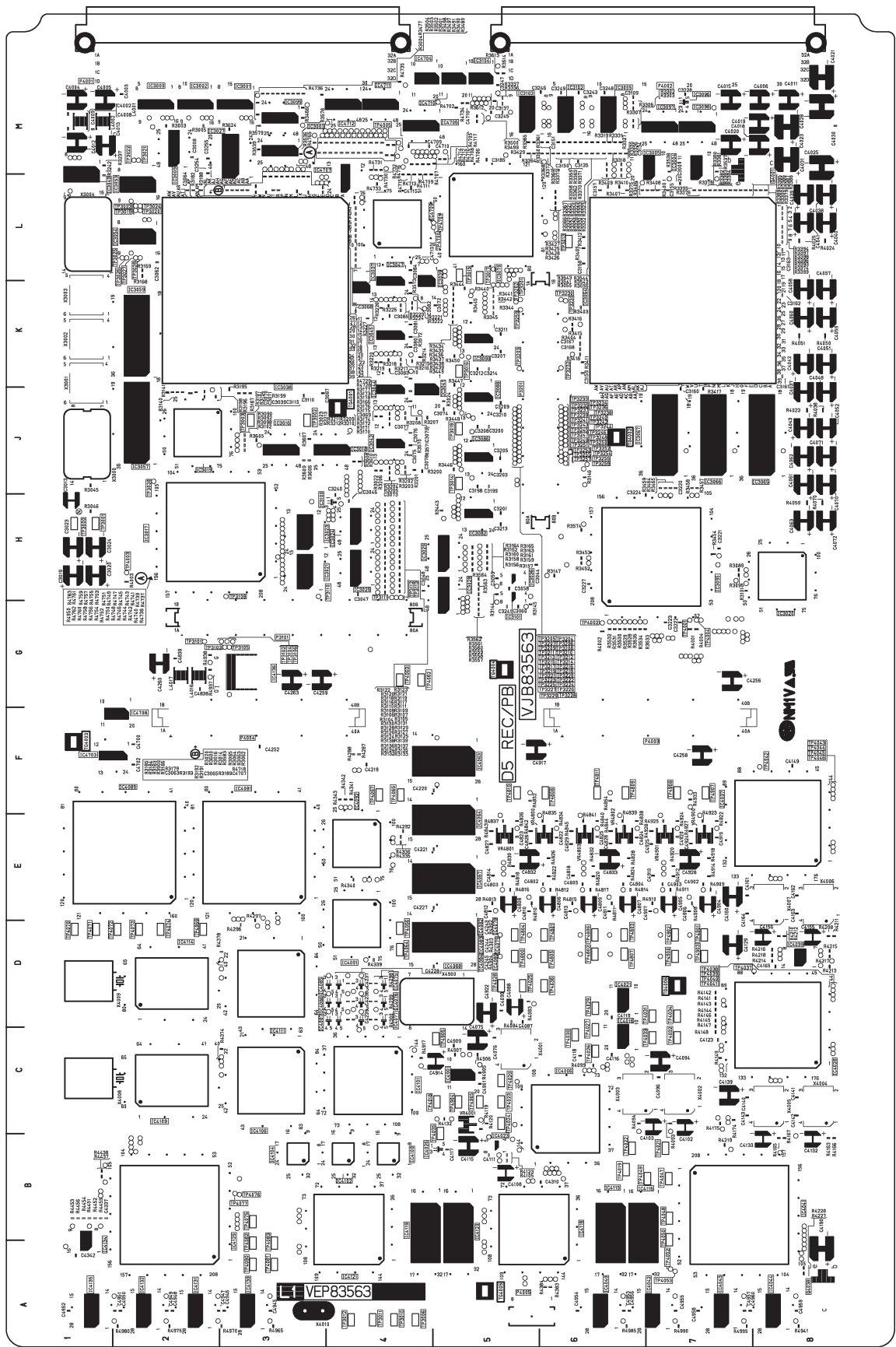
COMPONENTS IDENTIFIED WITH THE MARK  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CONTENTS

L1:D5 REC PB P.C.BOARD (VEP83563A).....	CBA-1
L1:PCM PB SUB P.C.BOARD (VEP84373A/B).....	CBA-5
L1:REC SUB P.C.BOARD (VEP83529A).....	CBA-7
L1:PB SUB P.C.BOARD (VEP83530A)	CBA-9
L2 PB PROC P.C.BOARD (VEP83503C:AJ-HD3700HP/VEP83503A:AJ-HD3700HE) ..	CBA-11
M1:SYS/SRV P.C.BOARD (VEP86316A)	CBA-15
S0:DRIVE P.C.BOARD (VEP82092B)	CBA-17
S1:EQ P.C.BOARD (VEP85198A)	CBA-19
S2:CUE/TC P.C.BOARD (VEP84351A)	CBA-21
S3:A ADDA P.C.BOARD (VEP84352A).....	CBA-23
S4:SDI OUT P.C.BOARD (VEP83506A).....	CBA-25
S4:HD SDI TX P.C.BOARD (VEP83460B).....	CBA-27
S5:SDI IN P.C.BOARD (VEP83509B:AJ-HD3700HP/VEP83509C:AJ-HD3700HE) .	CBA-28
S5:HD SDI RX P.C.BOARD (VEP83459B)	CBA-30

S5:RATE CON P.C.BOARD (VEP83510A)	CBA-32
S4:META SUB P.C.BOARD (VEP83550A:AJ-HD3700HP ONLY).....	CBA-33
L MOTHER P.C.BOARD (VEP89136A)	CBA-34
S MOTHER P.C.BOARD (VEP89137A).....	CBA-35
SUB MOTHER P.C.BOARD (VEP89138A:AJ-HD3700HP/VEP89138B:AJ-HD3700HE)	CBA-36
REC AMP P.C.BOARD (VEP85188A)	CBA-37
CYL POWER P.C. BOARD (VEP85040B)	CBA-38
AT DRIVE P.C. BOARD (VEP82095A)	CBA-39
MECH IF P.C.BOARD (VEP80788A)	CBA-40
SERVO CNTL P.C.BOARD (VEP82234A).....	CBA-41
REAR JACK P.C.BOARD (VEP83512B:AJ-HD3700HP/VEP83512C:AJ-HD3700HE)	CBA-42
POWER1 P.C.BOARD (VEP81211A:AJ-HD3700HP/VEP81211B:AJ-HD3700HE)...	CBA-44
POWER2 P.C.BOARD (VEP81212A)	CBA-45
POWER SUB1 P.C.BOARD (VEP81213A).....	CBA-46
POWER SUB2 P.C.BOARD (VEP81214A).....	CBA-46
ERROR LED P.C.BOARD (VEP80804A).....	CBA-47
AUTO OFF LED P.C.BOARD (VEP80792A)	CBA-47
HP VR P.C.BOARD (VEP86130A).....	CBA-47
EJECT P.C.BOARD (VEP80790A)	CBA-47
FRONT CNTL1 P.C.BOARD (VEP86300A)	CBA-48
FRONT CNTL2 P.C.BOARD (VEP86301A).....	CBA-50
FRONT SW P.C.BOARD (VEP86302A).....	CBA-52
MEM CARD P.C.BOARD (VEP86312A)	CBA-53
FR FUNCTION P.C.BOARD (VEP86305A)	CBA-53
FR LED P.C.BOARD (VEP86306A).....	CBA-54
FR MODE P.C.BOARD (VEP86304A)	CBA-54
L2:L2 GATE P.C.BOARD (VEP83552A)	CBA-55
CLK DRV P.C.BOARD (VEP83575A).....	CBA-55
FR HP JACK P.C.BOARD (VEP86317A)	CBA-55
UP DOWN P.C.BOARD (VEP83498C:AJ-UDC3700P option)	CBA-56
420P SUB P.C.BOARD (VEP83543A:AJ-UDC3700P option).....	CBA-58

L1: D5 REC PB P.C. BOARD (VEP83563A)

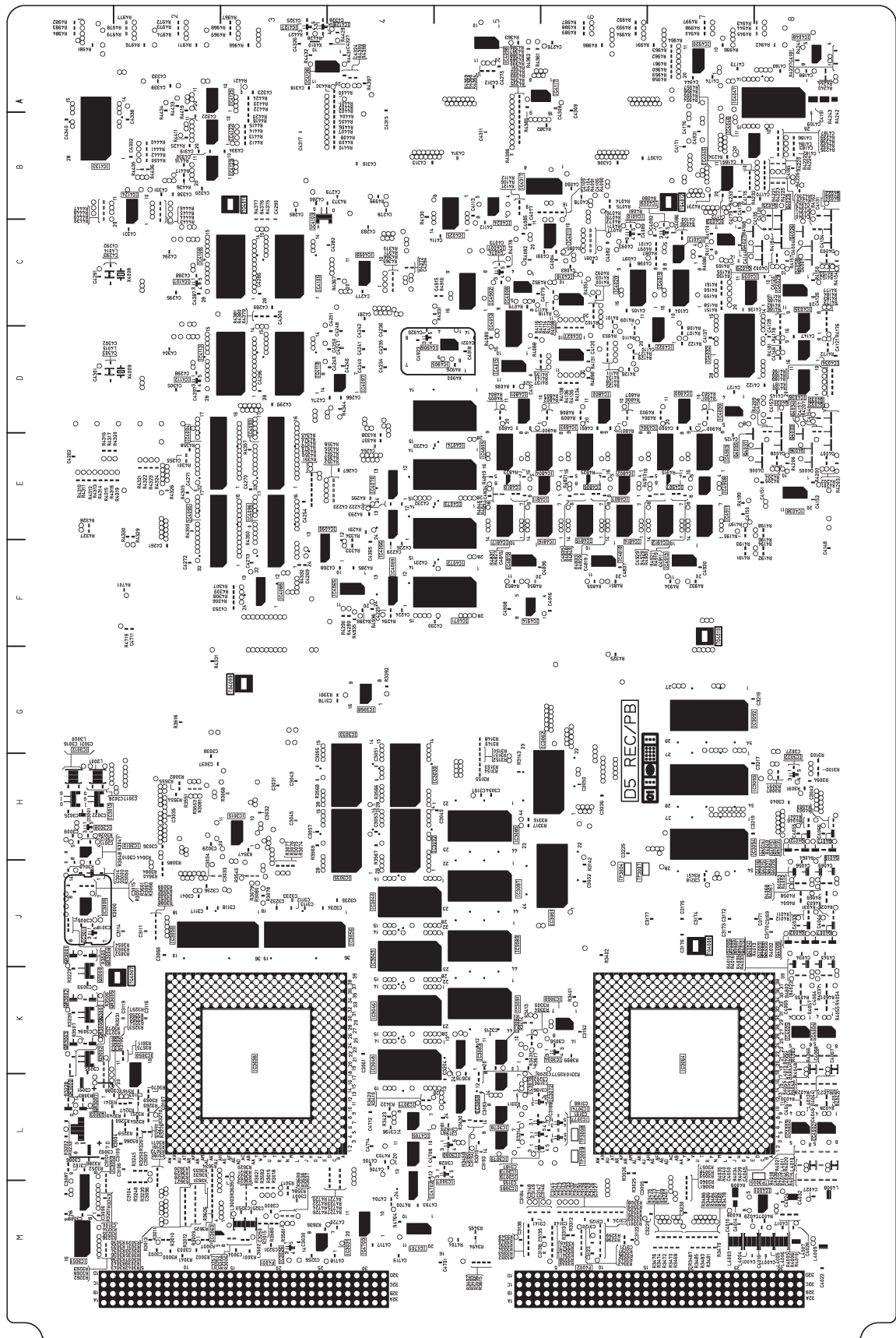


(COMPONENT SIDE)

L1: D5 REC PB P.C. BOARD (VEP83563A)

L1 D5 REC PB P.C. BOARD (COMPONENT SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC3000	M2	IC3090	K5	IC4118	B5	TG4006	D7	TP4062	G4	VR4901	E7
IC3001	M3	IC3095	H7	IC4119	B4	TP3000	H1	TP4063	G4	X3000	J1
IC3002	M2	IC3096	M7	IC4120	B5	TP3001	H1	TP4064	D4	X3001	K1
IC3003	M3	IC3097	M7	IC4121	B4	TP3002	J3	TP4065	F4	X3002	K1
IC3004	M7	IC3098	M7	IC4129	B2	TP3003	J3	TP4066	D4	X3003	K1
IC3005	M7	IC3099	M3	IC4130	A3	TP3006	A4	TP4067	F4	X3004	L1
IC3009	M2	IC3100	H4	IC4131	A2	TP3010	A4	TP4075	B3	X4001	C5
IC3016	J3	IC3101	H5	IC4132	A2	TP3011	A4	TP4080	A3	X4002	C7
IC3017	H2	IC3102	M6	IC4134	B1	TP3012	A4	TP4081	A3	X4003	C6
IC3018	J4	IC3103	M5	IC4135	A1	TP3013	L6	TP4082	A3	X4004	C8
IC3019	J2	IC3104	M5	IC4136	G3	TP3014	J5	TP4083	A3	X4005	C8
IC3020	H8	IC4006	C6	IC4703	F1	TP3015	L5	TP4800	D5	X4006	E8
IC3021	H3	IC4016	C6	IC4704	M4	TP3016	K5	TP4801	D6	X4007	E8
IC3023	H3	IC4021	D6	IC4706	M4	TP3017	L5	TP4802	D6	X4008	C1
IC3024	H4	IC4023	B5	IC4707	L4	TP3018	J5	TP4803	D6	X4009	D1
IC3025	H4	IC4026	B5	IC4708	F1	TP4018	C5	TP4804	D5	X4010	A3
IC3027	M3	IC4028	D8	IC4709	L4	TP4019	B6	TP4805	D6	X4900	D5
IC3028	H5	IC4037	E8	IC4710	M5	TP4020	C5	TP4806	D6		
IC3029	H5	IC4039	D8	IC4711	M4	TP4021	B7	TP4807	D6		
IC3036	H5	IC4040	A6	IC4712	M4	TP4022	B6	TP4808	F6		
IC3039	L4	IC4041	B7	IC4901	C5	TP4023	C5	TP4809	F6		
IC3041	K4	IC4042	A7	L4001	M1	TP4024	C5	TP4810	F5		
IC3042	J4	IC4043	A7	L4002	M1	TP4025	D5	TP4811	F6		
IC3044	K4	IC4044	A8	L4016	G2	TP4026	C6	TP4900	D7		
IC3045	K4	IC4063	F5	P3101	G3	TP4027	C6	TP4901	D7		
IC3047	L4	IC4064	E5	P3201	J5	TP4028	D5	TP4902	D7		
IC3049	L1	IC4067	E5	P4001	M3	TP4029	D6	TP4903	D7		
IC3053	L2	IC4068	D5	P4002	M7	TP4030	C6	TP4904	C5		
IC3054	L2	IC4100	B4	P4003	F7	TP4031	D7	TP4905	C5		
IC3055	M6	IC4101	C4	P4004	F3	TP4032	C7	TP4906	C5		
IC3064	K7	IC4102	B4	P4005	A5	TP4033	C7	TP4907	F7		
IC3065	J8	IC4104	B3	Q4001	M7	TP4034	D7	TP4908	F7		
IC3066	J7	IC4106	C3	Q4038	A8	TP4035	C5	VR4001	C5		
IC3067	J7	IC4109	C2	TG4001	J4	TP4036	D6	VR4800	E6		
IC3070	L5	IC4111	D3	TG4002	J6	TP4047	B7	VR4801	E5		
IC3082	H5	IC4114	D2	TG4003	F1	TP4048	B7	VR4802	E6		
IC3086	J5	IC4115	B6	TG4004	G5	TP4049	B7	VR4803	E6		
IC3088	J5	IC4116	B6	TG4005	A5	TP4050	B7	VR4900	E7		

L1: D5 REC PB P.C. BOARD (VEP83563A)



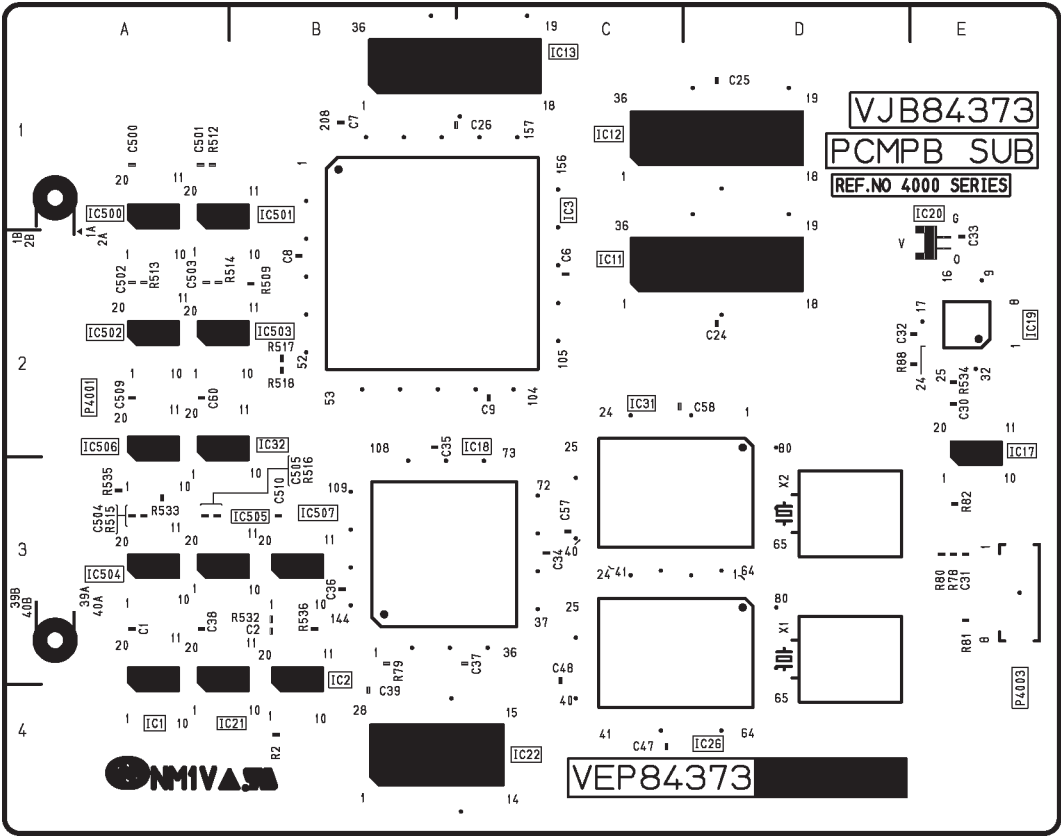
(FOIL SIDE)

L1: D5 REC PB P.C. BOARD (VEP83563A)

L1 D5 REC PB P.C. BOARD (FOIL SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC3006	J1	IC3075	L6	IC4022	D7	IC4117	A6	IC4907	E7	Q4024	C8
IC3007	L5	IC3076	L5	IC4025	B5	IC4122	B2	IC4908	E7	Q4025	C8
IC3008	H1	IC3077	L6	IC4027	D6	IC4123	B2	IC4911	E7	Q4026	C8
IC3010	H1	IC3078	L5	IC4029	C8	IC4124	B2	IC4912	E7	Q4027	C8
IC3011	J1	IC3079	L5	IC4030	D7	IC4125	A2	IC4913	F7	Q4028	C8
IC3012	H1	IC3080	L5	IC4031	C7	IC4126	A3	IC4914	F5	Q4029	C8
IC3013	H1	IC3081	L6	IC4032	D7	IC4127	A3	IC4920	A7	Q4030	D8
IC3015	H3	IC3083	K5	IC4033	C7	IC4128	A3	Q3000	K1	Q4031	D8
IC3022	H8	IC3084	K5	IC4034	D8	IC4133	B1	Q3001	K1	Q4032	D8
IC3026	M3	IC3085	H5	IC4035	C8	IC4700	M4	Q3002	K1	Q4033	D8
IC3030	H4	IC3087	J5	IC4036	D8	IC4701	M4	Q3003	L1	Q4034	E8
IC3031	M3	IC3089	J5	IC4038	E8	IC4702	M4	Q4002	J8	Q4035	E8
IC3032	H4	IC3091	K5	IC4045	B7	IC4705	L4	Q4003	J8	Q4036	E8
IC3033	H4	IC3092	G7	IC4046	B8	IC4800	D6	Q4004	J8	Q4037	E8
IC3034	K6	IC3093	H7	IC4047	A8	IC4801	D5	Q4005	J8	QR3000	L1
IC3035	H4	IC3094	H7	IC4048	A8	IC4802	E6	Q4006	J8	QR3001	J1
IC3040	J4	IC4001	M8	IC4065	F4	IC4803	E6	Q4007	J8	QR3002	K1
IC3043	J4	IC4002	L8	IC4066	E4	IC4804	E6	Q4008	J8	QR3003	K1
IC3046	K4	IC4003	L8	IC4069	F4	IC4805	E5	Q4009	J8	QR3004	J1
IC3048	K4	IC4004	K8	IC4070	E4	IC4806	E6	Q4010	J8	QR3005	K1
IC3050	L2	IC4005	K8	IC4071	F5	IC4807	E6	Q4011	J8	QR3006	K1
IC3051	M1	IC4007	C5	IC4072	E5	IC4810	E5	Q4012	H8	QR3007	L1
IC3052	M1	IC4008	C5	IC4073	E5	IC4814	E6	Q4013	H8	TG4008	J7
IC3060	K6	IC4009	C7	IC4074	D5	IC4815	E6	Q4014	H8	TG4009	G3
IC3061	J6	IC4010	C6	IC4098	A5	IC4816	E6	Q4015	J8	TG4010	F7
IC3062	H6	IC4011	C6	IC4099	C4	IC4817	E5	Q4016	J8	TG4011	B3
IC3063	M3	IC4012	C7	IC4103	B3	IC4819	F5	Q4017	H8	TG4012	B7
IC3068	G4	IC4013	D5	IC4105	C3	IC4900	D7	Q4018	H8	TP3004	J6
IC3069	L5	IC4015	D5	IC4107	C2	IC4902	C5	Q4019	H8	TP3005	L8
IC3071	L4	IC4017	B6	IC4108	C3	IC4903	E7	Q4020	J8	TP3007	J7
IC3072	L6	IC4018	C6	IC4110	D3	IC4904	E7	Q4021	J8	TP3008	L6
IC3073	L5	IC4019	C7	IC4112	D2	IC4905	D5	Q4022	B8	TP3009	L6
IC3074	L6	IC4020	C6	IC4113	D3	IC4906	D4	Q4023	B8		

L1: PCM PB SUB P.C. BOARD (VEP84373A/B)

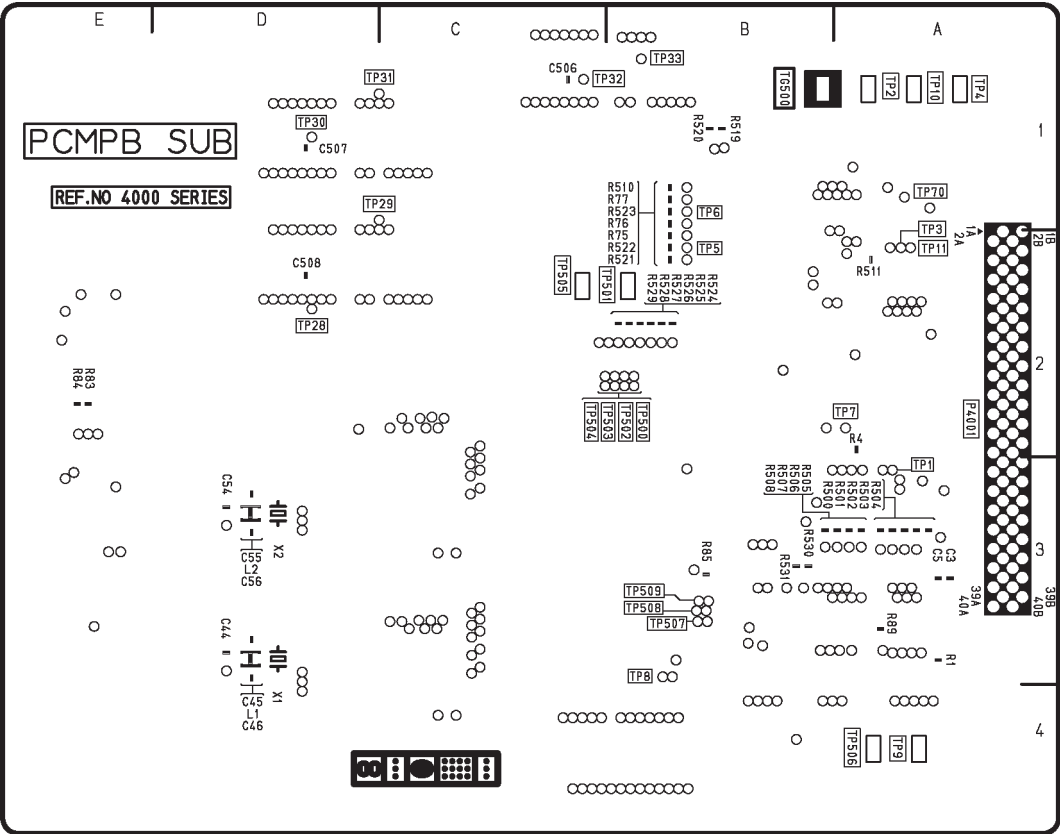
L1 PCM PB SUB P.C. BOARD (COMPONENT SIDE)									
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC4001	A3	IC4017	E2	IC4026	C3	IC4503	A2	P4003	E3
IC4002	B3	IC4018	B3	IC4031	C3	IC4504	A3	X4001	D3
IC4003	B2	IC4019	E2	IC4032	A2	IC4505	A3	X4002	D3
IC4011	D2	IC4020	E2	IC4500	A1	IC4506	A2		
IC4012	D1	IC4021	A3	IC4501	A1	IC4507	B3		
IC4013	B1	IC4022	B4	IC4502	A2	P4001	A2		



(COMPONENT SIDE)

L1: PCM PB SUB P.C. BOARD (VEP84373A/B)

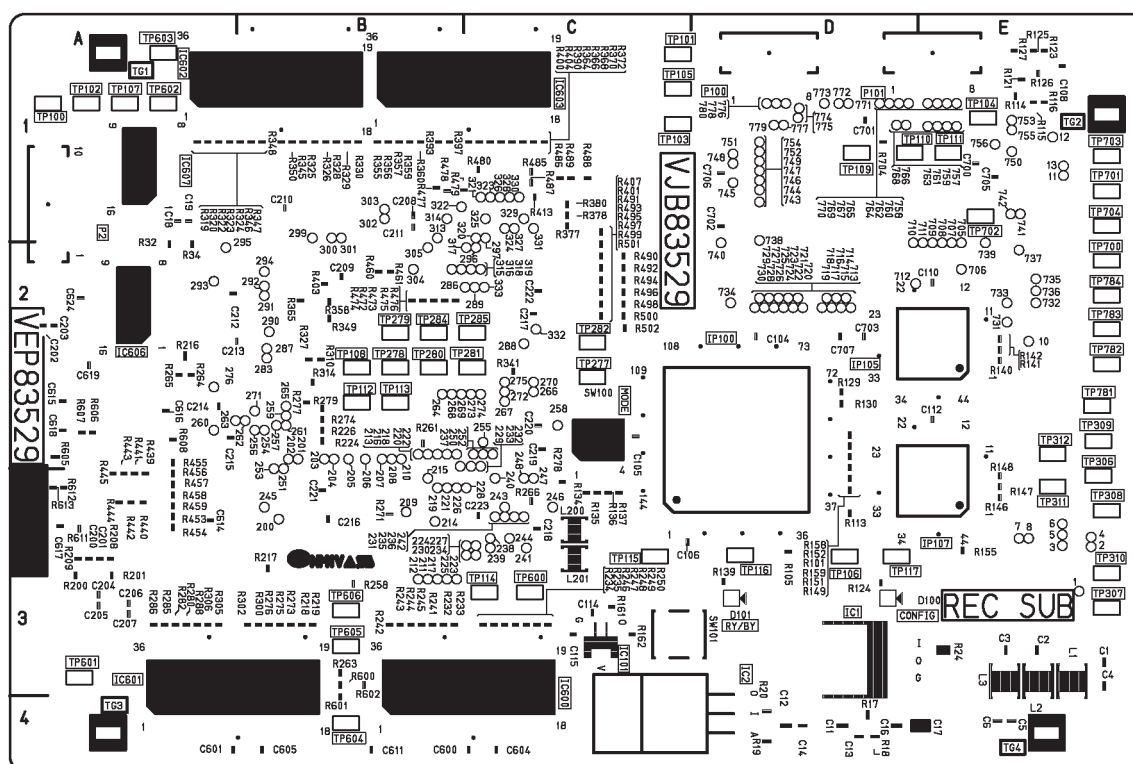
L1 PCM PB SUB P.C. BOARD (FOIL SIDE)									
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
TG4500	B1	TP4505	C2						
TP4002	A1	TP4506	A4						
TP4004	A1								
TP4009	A4								
TP4010	A1								
TP4501	B2								



(FOIL SIDE)

L1: REC SUB P.C. BOARD (VEP83529A)

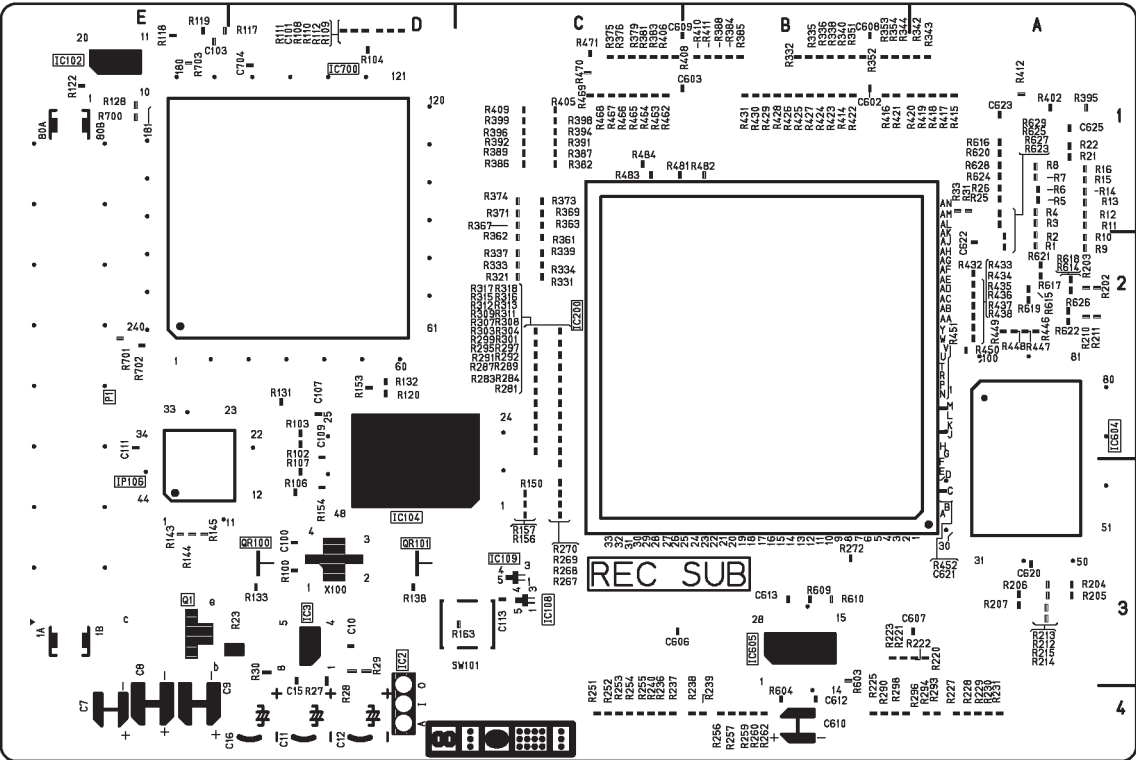
L1: REC SUB P.C. BOARD (COMPONENT SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC1	D3	SW101	C3	TP108	B2	TP280	B2	TP601	A3	TP783	E2
IC2	D4	TG1	A1	TP109	D1	TP281	C2	TP602	A1	TP784	E2
IC101	C3	TG2	E1	TP110	D1	TP282	C2	TP603	A1		
IC600	C3	TG3	A4	TP111	E1	TP284	B2	TP604	B4		
IC601	B3	TG4	E4	TP112	B2	TP285	C2	TP605	B3		
IC602	B1	TP100	A1	TP113	B2	TP306	E3	TP606	B3		
IC603	B1	TP101	C1	TP114	C3	TP307	E3	TP700	E2		
IC607	A1	TP102	A1	TP115	C3	TP308	E3	TP701	E1		
IP100	D2	TP103	C1	TP116	D3	TP309	E2	TP702	E1		
P2	A1	TP104	E1	TP117	D3	TP310	E3	TP703	E1		
P100	D1	TP105	C1	TP277	C2	TP311	E3	TP704	E1		
P101	D1	TP106	D3	TP278	B2	TP312	E2	TP781	E2		
SW100	C2	TP107	A1	TP279	B2	TP600	C3	TP782	E2		



(COMPONENT SIDE)

L1: REC SUB P.C. BOARD (VEP83529A)

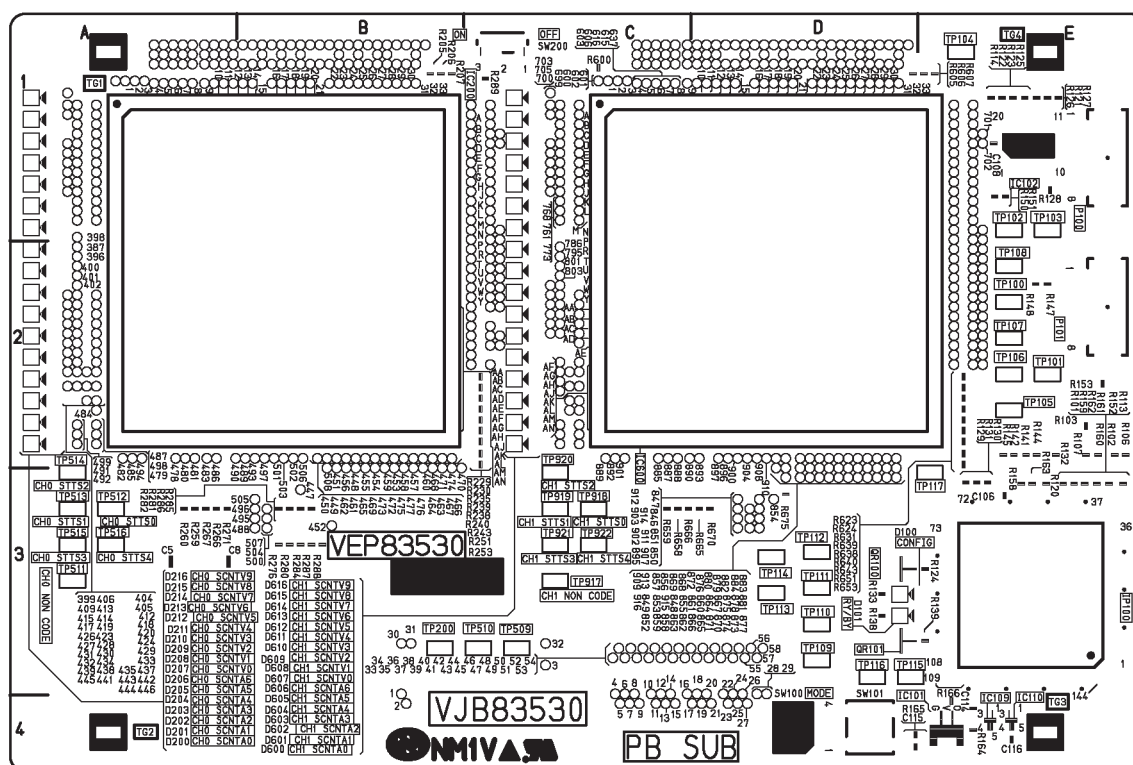
L1: REC SUB P.C. BOARD (FOIL SIDE)					
REF	LOC	REF	LOC	REF	LOC
IC3	D3	P1	E2		
IC102	E1	Q1	E3		
IC104	D3	QR100	D3		
IC108	C3	QR101	D3		
IC109	C3				
IC200	B2				
IC605	B3				
IC700	D1				



(FOIL SIDE)

L1: PB SUB P.C. BOARD (VEP83530A)

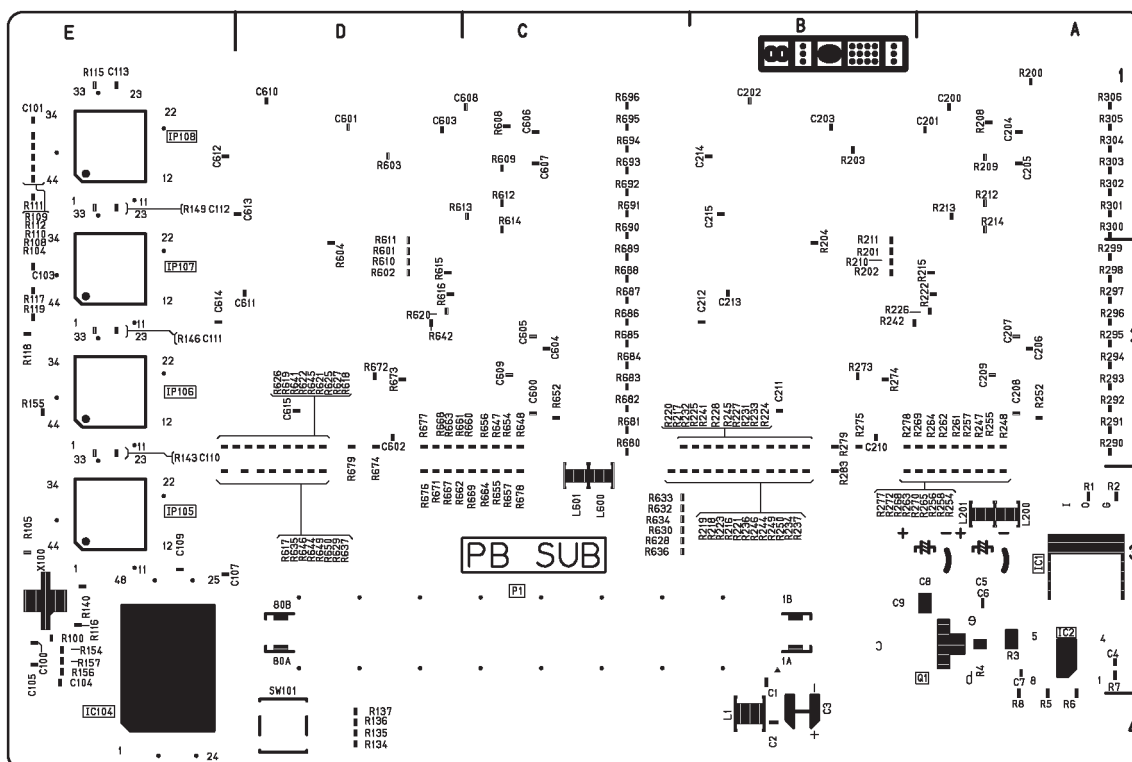
L1: PB SUB P.C. BOARD (COMPONENT SIDE)									
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC101	E4	SW100	D4	TP104	E1	TP115	D3	TP516	A3
IC102	E1	SW101	D4	TP105	E2	TP116	D3	TP917	C3
IC109	E4	SW200	C1	TP106	E2	TP117	E3	TP918	C3
IC110	E4	TG1	A1	TP107	E2	TP200	B3	TP919	C3
IC200	B2	TG2	A4	TP108	E2	TP509	C3	TP920	C3
IC600	D2	TG3	E4	TP109	D3	TP510	C3	TP921	C3
IP100	E3	TG4	E1	TP110	D3	TP511	A3	TP922	C3
P100	E1	TP100	E2	TP111	D3	TP512	A3		
P101	E2	TP101	E2	TP112	D3	TP513	A3		
QR100	D3	TP102	E2	TP113	D3	TP514	A3		
QR101	D3	TP103	E2	TP114	D3	TP515	A3		



(COMPONENT SIDE)

L1: PB SUB P.C. BOARD (VEP83530A)

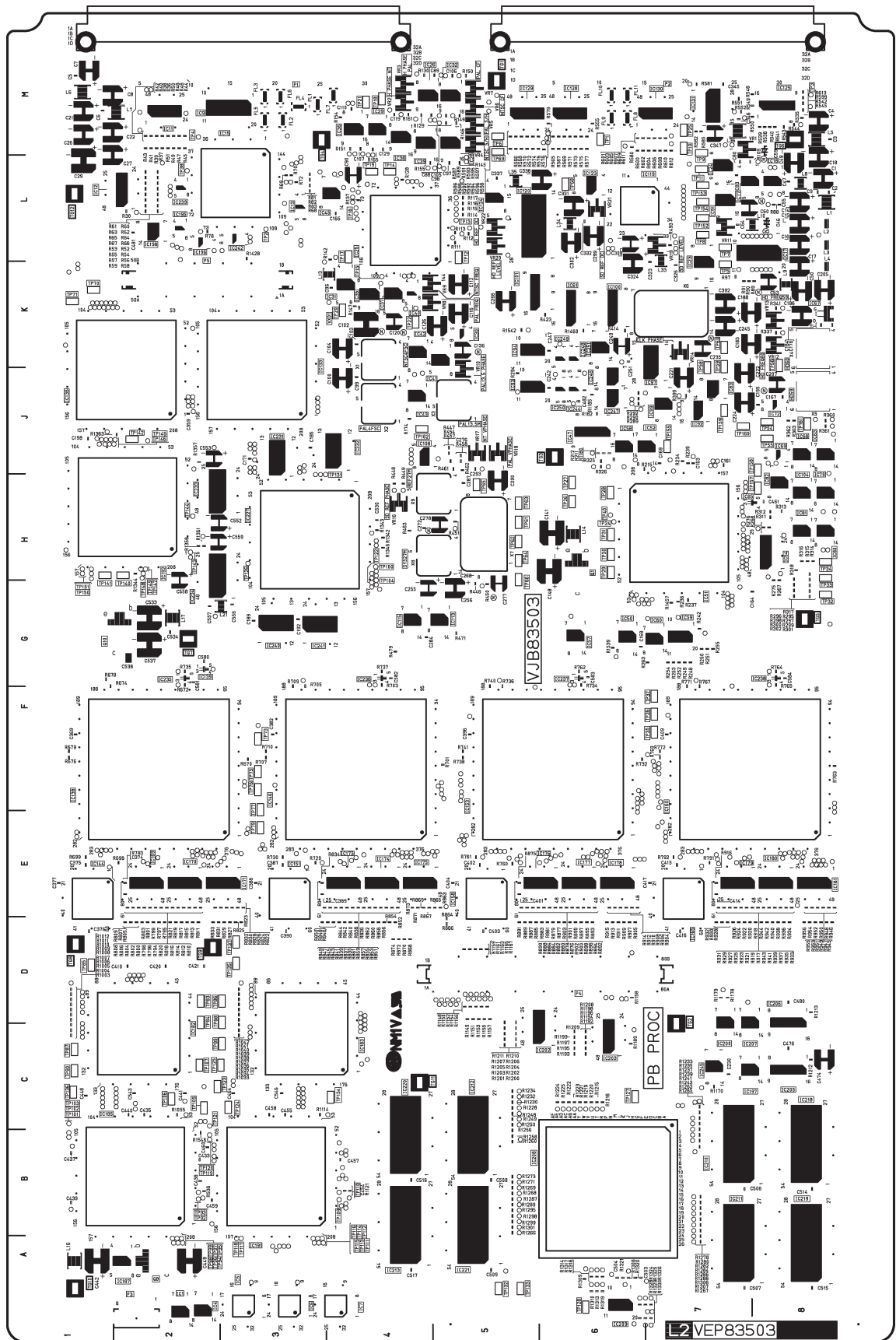
L1: PB SUB P.C. BOARD (FOIL SIDE)			
REF	LOC	REF	LOC
IC1	A3	IP107	E2
IC2	A3	IP108	E1
IC104	E3	P1	C3
IP105	E3	Q1	A3
IP106	E2		



(FOIL SIDE)

L2: PB PROC P.C. BOARD

(VEP83503C:AJ-HD3700HP/VEP83503A:AJ-HD3700HE)



(COMPONENT SIDE)

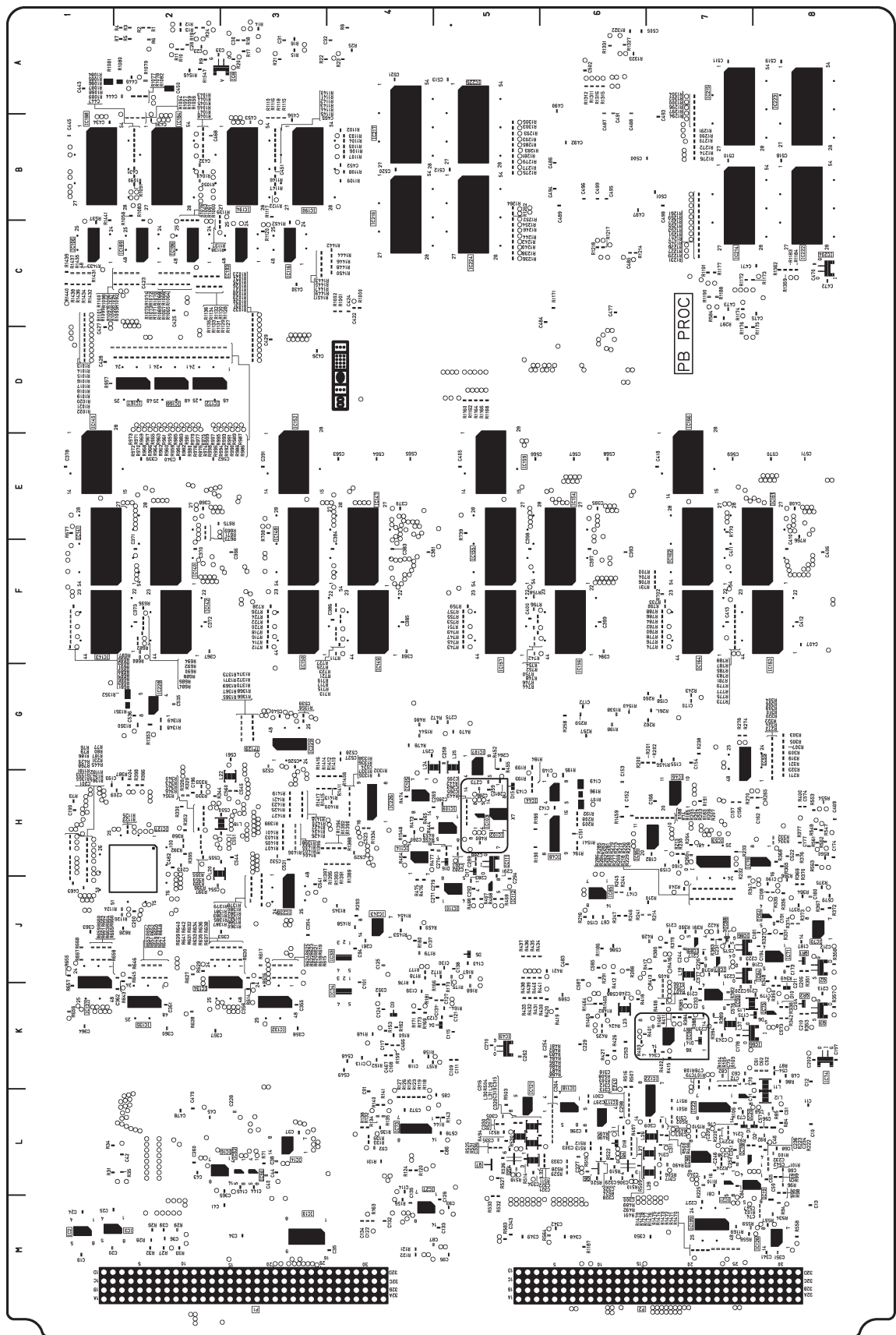
L2: PB PROC P.C. BOARD

(VEP83503C:AJ-HD3700HP/VEP83503A:AJ-HD3700HE)

L2:PB PROC P.C. BOARD (COMPONENT SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC1	A2	IC80	H8	IC183	C3	P4	D6	TP58	J7	TP159	J7
IC4	A2	IC81	H8	IC185	B2	P5	K2	TP59	K7	TP160	J7
IC5	A3	IC82	H8	IC187	A2	Q1	H6	TP60	K7	TP161	J8
IC6	A3	IC83	J7	IC191	B3	Q8	A2	TP61	H5	TP162	J4
IC7	A4	IC91	L7	IC192	H2	Q10	G2	TP62	H5	VR1	M7
IC9	M3	IC92	J7	IC195	L2	TG1	M5	TP63	H5	VR2	M4
IC11	M1	IC93	J5	IC196	L2	TG2	C7	TP64	H5	VR3	M4
IC12	L2	IC94	K5	IC197	C8	TG3	J6	TP65	H5	VR4	M5
IC13	L3	IC97	K7	IC198	L2	TG4	M3	TP66	H5	VR5	M5
IC15	L3	IC99	J7	IC200	C7	TG5	G8	TP68	L6	VR6	M5
IC17	L8	IC100	K6	IC202	C6	TG6	M8	TP69	M5	VR7	M5
IC18	L8	IC101	K6	IC203	C6	TG7	G2	TP70	K1	VR8	K5
IC23	K7	IC104	H8	IC205	C8	TG8	D1	TP71	K1	VR9	K5
IC24	L7	IC108	J1	IC206	C8	TG9	D3	TP73	F3	VR10	J5
IC25	L4	IC113	G5	IC207	C8	TG10	A1	TP75	F3	VR11	L7
IC26	M4	IC115	G4	IC208	B6	TG11	C4	TP76	F3	VR12	K8
IC28	M5	IC119	L6	IC209	A6	TG12	L1	TP77	E3	VR13	K8
IC29	M4	IC120	L5	IC210	B7	TP1	M6	TP79	E3	VR14	K7
IC30	K5	IC123	L6	IC211	A7	TP5	K7	TP83	D2	VR16	H4
IC31	K4	IC124	L5	IC212	B5	TP6	M5	TP84	C2	VR17	J5
IC32	M5	IC125	M1	IC213	A4	TP7	L7	TP85	D1	VR18	J5
IC35	K4	IC128	M1	IC218	B8	TP8	L7	TP86	D3	VR19	L7
IC36	M4	IC129	M1	IC219	A8	TP9	L7	TP87	C1	VR20	L5
IC37	K4	IC130	M1	IC220	B4	TP10	M7	TP88	C3	VR21	L6
IC38	M4	IC131	M1	IC221	A5	TP11	L7	TP89	C3	VR22	L5
IC39	M4	IC133	J3	IC227	H3	TP12	L5	TP90	C1	X1	K4
IC40	K4	IC136	J2	IC231	J3	TP14	L4	TP105	C2	X2	J4
IC41	K5	IC138	F2	IC232	J4	TP17	L4	TP106	C2	X3	J5
IC42	K4	IC139	G2	IC233	H3	TP18	M4	TP107	C2	X4	K8
IC43	J4	IC144	D1	IC234	H3	TP19	L4	TP123	C3	X5	J8
IC45	L4	IC146	F4	IC235	G2	TP20	K4	TP124	C3	X6	K7
IC47	J6	IC151	D3	IC236	G4	TP21	M4	TP125	C3	X7	H5
IC50	G6	IC153	F6	IC237	G6	TP22	K4	TP127	C6	X8	H5
IC51	H7	IC158	D5	IC238	G8	TP25	M7	TP128	A6	X9	H5
IC52	J7	IC160	F8	IC239	L2	TP26	H6	TP132	A5		
IC54	H8	IC165	D7	IC240	G1	TP27	H6	TP133	A5		
IC57	G6	IC169	E2	IC241	G1	TP28	H6	TP134	C4		
IC58	J6	IC170	E2	IC242	L3	TP29	H6	TP135	D3		
IC59	G7	IC171	E3	IC244	J6	TP30	H6	TP136	C1		
IC60	G7	IC173	E4	IC245	C7	TP31	H6	TP137	D3		
IC61	K6	IC174	E4	IC246	J6	TP32	G8	TP140	H2		
IC63	J8	IC175	E4	IC247	J6	TP33	H8	TP141	H2		
IC65	H8	IC176	E6	IC248	K6	TP34	H8	TP142	J2		
IC67	K8	IC177	E6	IC249	K6	TP35	F7	TP152	L7		
IC68	J8	IC178	E6	IC250	J6	TP36	F7	TP153	L7		
IC69	J8	IC179	E7	IC251	K6	TP37	F7	TP154	L7		
IC72	J8	IC180	E8	P1	M3	TP54	J8	TP155	J7		
IC77	L8	IC181	E8	P2	M7	TP55	J8	TP157	H8		
IC79	H8	IC182	C2	P3	A2	TP56	K8	TP158	J8		

L2: PB PROC P.C. BOARD

(VEP83503C:AJ-HD3700HP/VEP83503A:AJ-HD3700HE)



(FOIL SIDE)

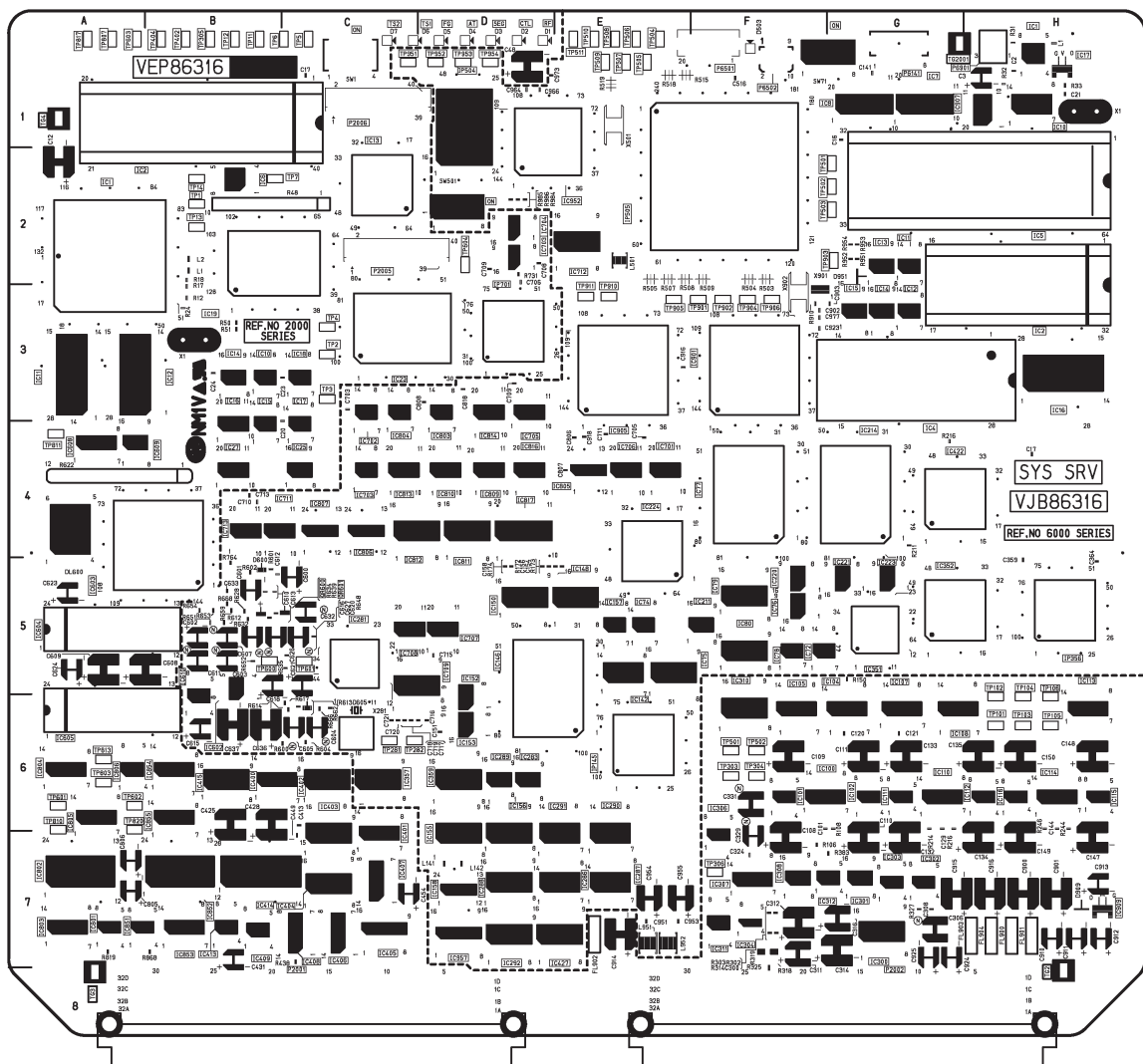
L2: PB PROC P.C. BOARD

(VEP83503C:AJ-HD3700HP/VEP83503A:AJ-HD3700HE)

L2: PB PROC P.C. BOARD (FOIL SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2	M1	IC64	J8	IC105	H4	IC142	F2	IC184	B2	IC243	J4
IC3	M2	IC66	K8	IC106	C1	IC143	F1	IC186	C2	Q2	K8
IC8	A3	IC70	J8	IC107	H5	IC145	E1	IC188	B1	Q3	K8
IC10	M3	IC71	J8	IC109	H5	IC147	F4	IC189	C2	Q4	L6
IC14	L3	IC73	L4	IC110	J5	IC148	F3	IC190	B3	Q5	L5
IC16	L2	IC74	K8	IC111	J5	IC149	F4	IC193	C3	Q6	L6
IC19	M8	IC75	K8	IC112	J5	IC150	F3	IC194	B3	Q7	L5
IC20	L7	IC76	J8	IC114	H4	IC152	E3	IC199	M7	QR1	J8
IC21	M7	IC78	L7	IC116	C3	IC154	F6	IC204	C8	QR2	K8
IC22	L7	IC84	K7	IC117	L6	IC155	F5	IC214	B7		
IC27	M4	IC85	J6	IC118	L6	IC156	F6	IC215	A7		
IC33	J4	IC86	J7	IC121	L5	IC157	F5	IC216	B4		
IC34	K4	IC87	J7	IC122	L7	IC159	E5	IC217	B4		
IC44	H6	IC88	J7	IC126	M8	IC161	F8	IC222	B8		
IC46	H7	IC89	J7	IC127	J2	IC162	F7	IC223	A8		
IC48	H6	IC90	K7	IC132	K3	IC163	F8	IC224	B5		
IC49	K5	IC95	H7	IC134	K3	IC164	F7	IC225	B5		
IC53	J7	IC96	L7	IC135	K2	IC166	E7	IC226	H4		
IC55	H7	IC98	K7	IC137	K1	IC167	D2	IC228	G2		
IC56	L3	IC102	H5	IC140	F2	IC168	D2	IC229	G3		
IC62	L3	IC103	H5	IC141	F1	IC172	D2	IC230	J3		

M1: SYS/SRV P.C. BOARD (VEP86316A)

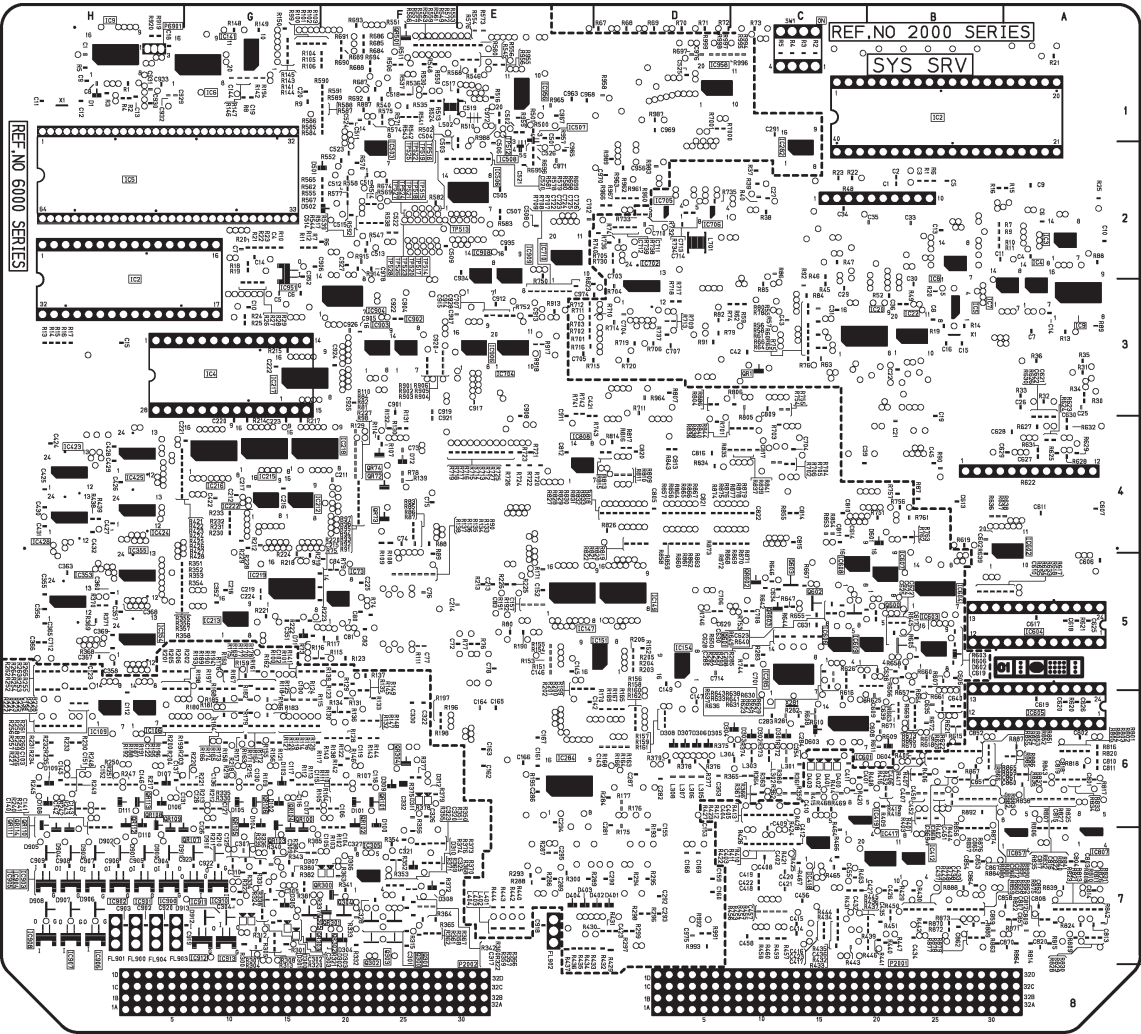
M1:SYS/SRV P.C. BOARD (COMPONENT SIDE)															
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2001	A2	IC2302	G7	IC2804	A6	IC6142	E5	IC6602	B5	IP2701	D3	TP2102	H5	TP6506	E1
IC2002	C1	IC2303	G7	IC2805	A6	IC6146	D5	IC6610	B5	IP6145	E6	TP2103	H6	TP6507	E1
IC2010	B3	IC2304	F7	IC2806	A6	IC6148	E5	IC6701	E4	IP6356	H5	TP2104	H5	TP6508	E1
IC2011	A3	IC2306	F6	IC2851	A7	IC6150	D5	IC6702	C3	IP6504	D1	TP2105	H6	TP6509	E1
IC2012	A3	IC2307	F7	IC2852	B7	IC6152	D5	IC6703	C4	IP6505	F2	TP2106	H5	TP6510	E1
IC2013	C2	IC2308	F7	IC2853	B7	IC6153	D6	IC6705	D3	P2001	C8	TP2303	F6	TP6511	E1
IC2014	B3	IC2310	F6	IC2854	B6	IC6155	D6	IC6706	E4	P2002	G8	TP2304	F6	TP6600	B5
IC2015	B4	IC2311	F7	IC2855	B6	IC6156	D6	IC6707	D5	P6141	G1	TP2305	B1	TP6601	C5
IC2016	B4	IC2400	B6	IC2909	H7	IC6157	E5	IC6708	C5	P6501	F1	TP2306	F7	TP6901	F3
IC2017	C4	IC2401	C6	IC6001	H1	IC6158	D7	IC6709	C5	P6502	F1	TP2402	B1	TP6902	F3
IC2018	C3	IC2402	C6	IC6002	H1	IC6211	F5	IC6711	B4	P6901	H1	TP2404	B1	TP6903	G2
IC2019	B2	IC2403	C6	IC6004	H1	IC6214	G4	IC6712	E2	QR6600	B5	TP2501	F6	TP6904	F3
IC2023	C3	IC2404	C7	IC6005	H1	IC6220	F5	IC6713	B4	QR6601	C5	TP2502	F6	TP6905	E3
IC2025	C4	IC2405	C7	IC6007	G1	IC6221	G5	IC6803	D3	SW2001	C1	TP2601	A6	TP6906	F3
IC2027	B4	IC2406	C7	IC6008	G1	IC6223	G5	IC6804	C3	SW6071	F1	TP2602	A6	TP6910	E3
IC2100	F6	IC2407	C7	IC6010	H1	IC6224	E4	IC6805	E4	SW6501	D2	TP2603	A1	TP6911	E3
IC2101	F6	IC2408	C7	IC6011	G2	IC6281	C5	IC6806	C4	TG2001	G1	TP2604	D2	TP6951	C1
IC2102	G6	IC2409	B7	IC6012	G3	IC6283	D6	IC6807	C4	TG2002	H7	TP2803	A6	TP6952	D1
IC2104	G6	IC2413	B7	IC6013	G2	IC6286	E7	IC6809	D4	TG2003	A7	TP2807	A1	TP6953	D1
IC2105	F6	IC2414	B7	IC6014	G3	IC6287	E7	IC6810	D4	TG2004	A1	TP2810	A6	TP6954	D1
IC2107	G6	IC2415	B6	IC6015	G3	IC6288	D7	IC6811	D4	TP2002	C3	TP2811	A4	X2001	B3
IC2108	G6	IC2603	B4	IC6016	H3	IC6289	D6	IC6812	C4	TP2003	C3	TP2813	A6	X6001	H1
IC2110	G6	IC2604	A5	IC6017	H1	IC6290	E6	IC6813	C4	TP2004	C3	TP2817	A1	X6281	C1
IC2111	G6	IC2605	A6	IC6072	F5	IC6291	E6	IC6814	D3	TP2005	C1	TP2820	A6	X6501	E1
IC2112	H6	IC2608	A4	IC6074	E5	IC6292	D7	IC6816	D4	TP2006	C1	TP6281	C6	X6901	F3
IC2113	H6	IC2609	A4	IC6075	E5	IC6351	G5	IC6817	D4	TP2007	B2	TP6282	C6	X6902	F3
IC2114	H6	IC2703	D2	IC6076	F5	IC6352	G5	IC6901	F3	TP2011	B1	TP6501	G2		
IC2115	H6	IC2704	D2	IC6077	F4	IC6357	C6	IC6905	E3	TP2012	B1	TP6502	G2		
IC2116	H6	IC2801	A7	IC6078	F5	IC6359	D6	IC6907	H1	TP2013	B2	TP6503	G2		
IC2300	G7	IC2802	A7	IC6079	F5	IC6422	G4	IC6952	D1	TP2014	B2	TP6504	E1		
IC2301	G7	IC2803	A7	IC6080	F5	IC6427	E7	IC6957	D7	TP2101	H6	TP6505	E1		



(COMPONENT SIDE)

M1: SYS/SRV P.C. BOARD (VEP86316A)

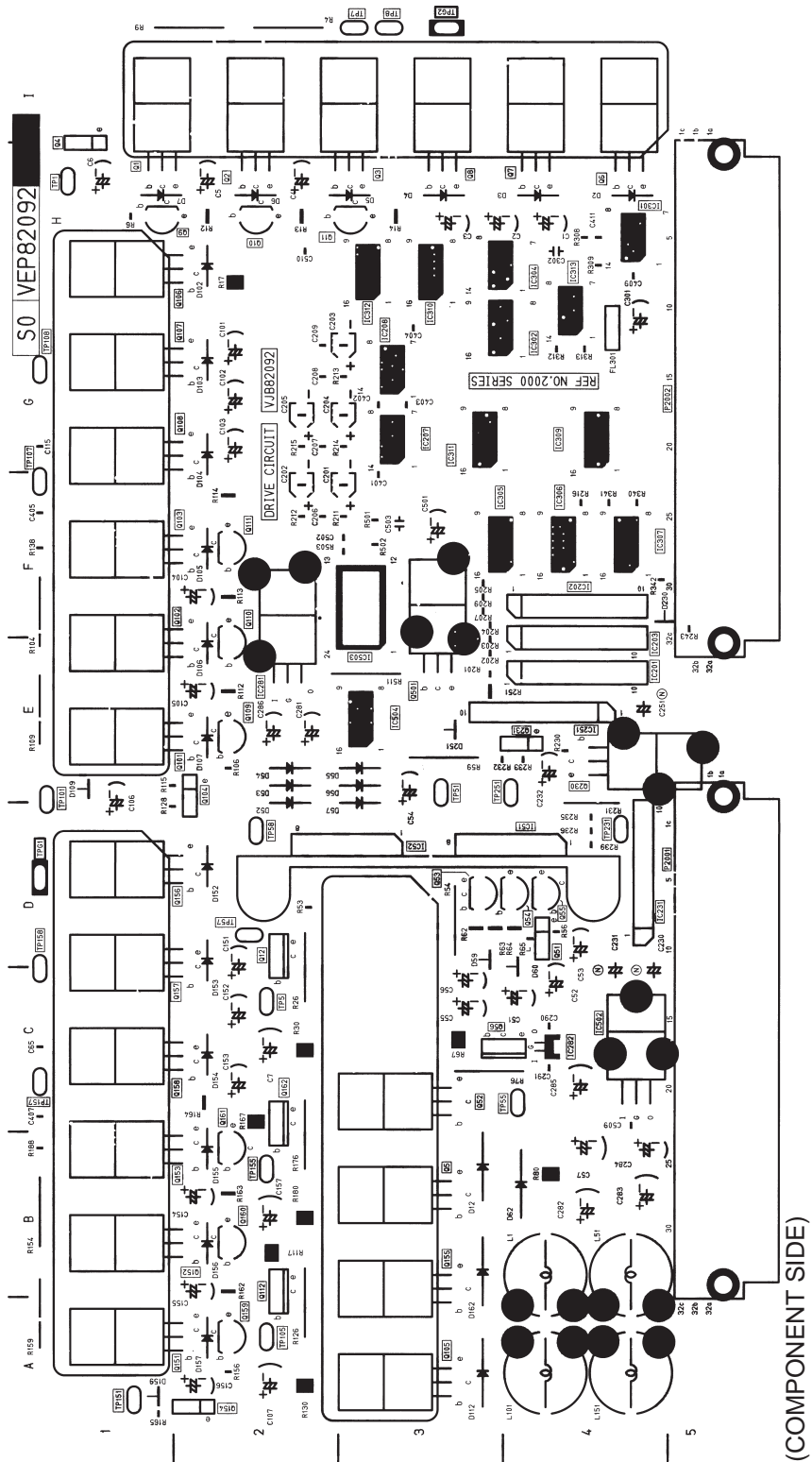
M1: SYS/SRV P.C. BOARD (FOIL SIDE)															
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2003	A2	IC2706	D2	IC2913	G7	IC6219	G5	IC6508	E2	IC6908	E2	QR2001	C3	QR2114	H6
IC2004	A3	IC2807	A6	IC6006	G1	IC6222	G4	IC6601	C6	IC6909	E2	QR2100	G6	QR2300	F7
IC2005	B3	IC2857	A6	IC6009	H1	IC6282	C2	IC6603	B5	IC6951	G2	QR2101	F6	QR2301	F7
IC2007	A3	IC2900	H7	IC6073	F5	IC6284	E6	IC6604	B5	IC6956	E1	QR2102	F6	QR2302	F7
IC2008	B2	IC2901	H7	IC6141	G1	IC6285	C5	IC6606	C5	IC6958	D1	QR2103	G6	QR2303	G7
IC2009	A3	IC2902	H7	IC6147	E5	IC6353	H5	IC6607	B5	Q2300	F7	QR2104	G6	QR2304	F6
IC2022	B3	IC2903	H7	IC6149	D5	IC6354	H5	IC6608	C5	Q2301	F7	QR2105	G6	QR6072	F4
IC2106	H6	IC2904	H7	IC6151	D5	IC6355	H5	IC6609	B5	Q2302	F7	QR2106	G6	QR6073	F4
IC2109	H6	IC2905	H7	IC6154	D5	IC6423	H4	IC6704	E3	Q2303	F7	QR2107	H6	QR6074	F4
IC2305	F7	IC2906	H7	IC6212	G4	IC6424	H4	IC6710	E2	Q2304	F7	QR2108	H6	QR6501	F1
IC2412	B7	IC2907	H7	IC6213	G5	IC6425	H4	IC6808	E4	Q2305	G7	QR2109	H6	QR6602	C5
IC2417	B7	IC2908	H7	IC6215	G4	IC6428	H4	IC6902	F3	Q6600	B5	QR2110	H6	QR6603	C5
IC2602	A4	IC2910	G7	IC6216	G4	IC6503	F2	IC6903	F3	Q6601	C5	QR2111	H6		
IC2702	D3	IC2911	G7	IC6217	G3	IC6506	E2	IC6904	F3	Q6602	C5	QR2112	H6		
IC2705	D2	IC2912	G7	IC6218	G4	IC6507	E2	IC6906	E3	Q6603	C5	QR2113	H6		



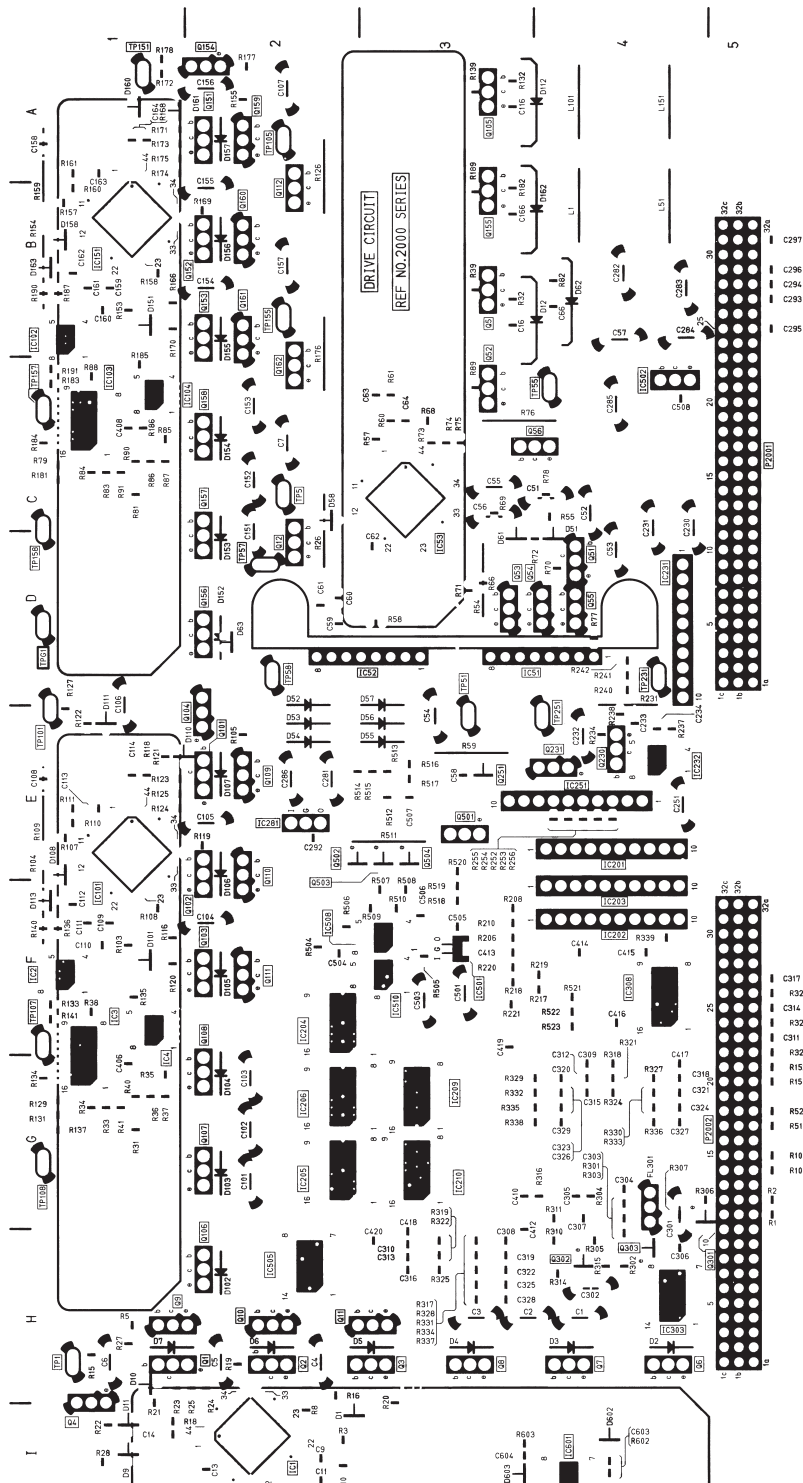
(FOIL SIDE)

S0: DRIVE P.C. BOARD (VEP82092B)

DRIVE (SO)(COMPONENT SIDE)													
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
Q2001	H-1	Q2055	D-4	Q2153	B-2	IC2202	F-4	IC2311	G-3	TP2107	G-1		
Q2002	H-2	Q2056	C-3	Q2154	A-2	IC2203	E-4	IC2312	H-3	TP2108	G-1		
Q2003	H-3	Q2101	E-2	Q2155	B-3	IC2207	G-3	IC2313	H-4	TP2151	A-1		
Q2004	I-1	Q2102	F-2	Q2156	D-2	IC2208	G-3	IC2502	C-4	TP2155	B-2		
Q2005	B-3	Q2103	F-2	Q2157	C-2	IC2231	D-4	IC2503	E-3	TP2157	C-1		
Q2006	H-4	Q2104	E-2	Q2158	C-2	IC2251	E-4	IC2504	E-3	TP2158	D-1		
Q2007	H-4	Q2105	A-3	Q2159	A-2	IC2281	E-2	TP2001	H-1	TP2231	D-4		
Q2008	H-3	Q2106	G-2	Q2160	B-2	IC2282	C-4	TP2005	C-2	TP2251	E-4		
Q2009	H-1	Q2107	G-2	Q2161	B-2	IC2301	H-4	TP2007	I-3	TPG2001	D-1		
Q2010	H-2	Q2108	G-2	Q2162	C-2	IC2302	G-4	TP2008	I-3	TPG2002	I-3		
Q2011	H-2	Q2109	E-2	Q2230	E-4	IC2304	H-4	TP2051	E-3	P2001	D-5		
Q2012	D-2	Q2110	F-2	Q2231	F-3	IC2305	F-3	TP2055	C-4	P2002	G-5		
Q2051	D-4	Q2111	F-2	Q2501	E-3	IC2306	F-4	TP2057	D-2				
Q2052	C-3	Q2112	B-2	IC2051	D-3	IC2307	F-4	TP2058	D-4				
Q2053	D-3	Q2115	A-2	IC2052	D-3	IC2308	G-4	TP2101	E-1				
Q2054	D-4	Q2152	B-2	IC2201	E-4	IC2310	H-3	TP2105	A-2				



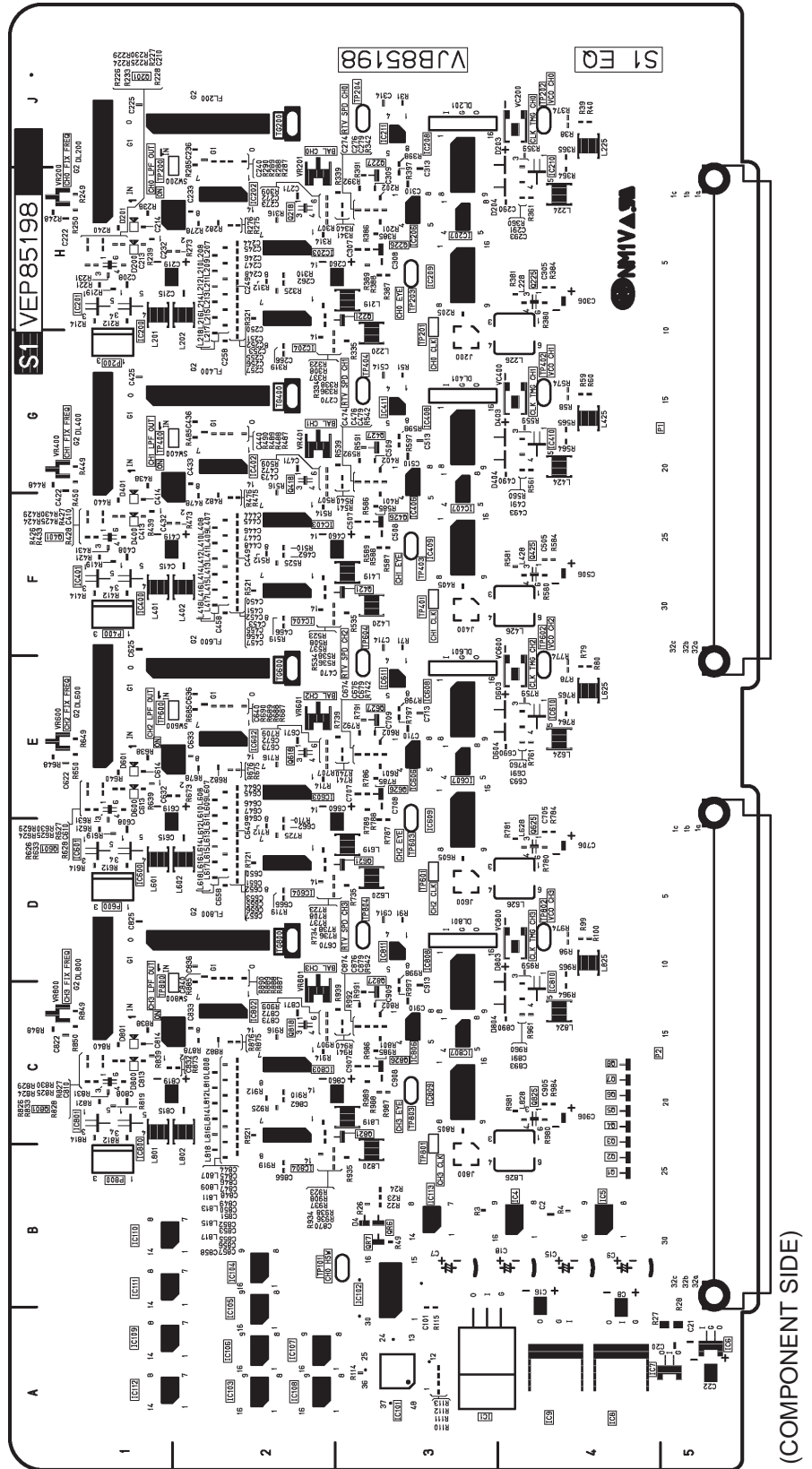
DRIVE (SO)(FOIL SIDE)									
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
Q2001	H-1	Q2101	E-2	Q2157	C-2	IC2003	F-1	IC2231	D-4
Q2002	H-2	Q2102	F-2	Q2158	C-2	IC2004	F-1	IC2232	E-4
Q2003	H-3	Q2103	F-2	Q2159	A-2	IC2051	D-3	IC2261	E-4
Q2004	I-1	Q2104	E-2	Q2160	B-2	IC2052	D-3	IC2281	E-2
Q2005	B-3	Q2105	A-3	Q2161	B-2	IC2053	C-3	IC2303	H-4
Q2006	H-4	Q2106	H-2	Q2162	C-2	IC2101	E-1	IC2308	F-4
Q2007	H-4	Q2107	G-2	Q2230	E-4	IC2102	B-1	IC2501	F-3
Q2008	H-3	Q2108	G-2	Q2231	E-4	IC2103	C-1	IC2502	C-4
Q2009	H-1	Q2109	E-2	Q2251	E-3	IC2104	C-1	IC2505	H-2
Q2010	H-2	Q2110	F-2	Q2301	H-4	IC2151	B-1	IC2508	C-1
Q2011	H-2	Q2111	F-2	Q2302	H-4	IC2201	E-4	IC2510	F-2
Q2012	D-2	Q2112	B-2	Q2303	H-4	IC2202	F-4	IC2601	E-4
Q2051	D-4	Q2151	A-2	Q2501	E-3	IC2203	F-4	TPG2001	H-1
Q2052	D-3	Q2152	B-2	Q2502	E-2	IC2204	F-2	TPG2002	C-2
Q2053	C-3	Q2153	B-2	Q2503	F-2	IC2205	G-2	P2001	C-5
Q2054	D-4	Q2154	A-2	Q2504	E-3	IC2206	G-2	TP2008	I-3
Q2055	D-4	Q2155	B-3	IC2001	I-2	IC2209	G-3	TP2051	D-3
Q2056	C-3	Q2156	D-2	IC2002	F-1	IC2210	G-3	TP2055	C-4



(FOIL SIDE)

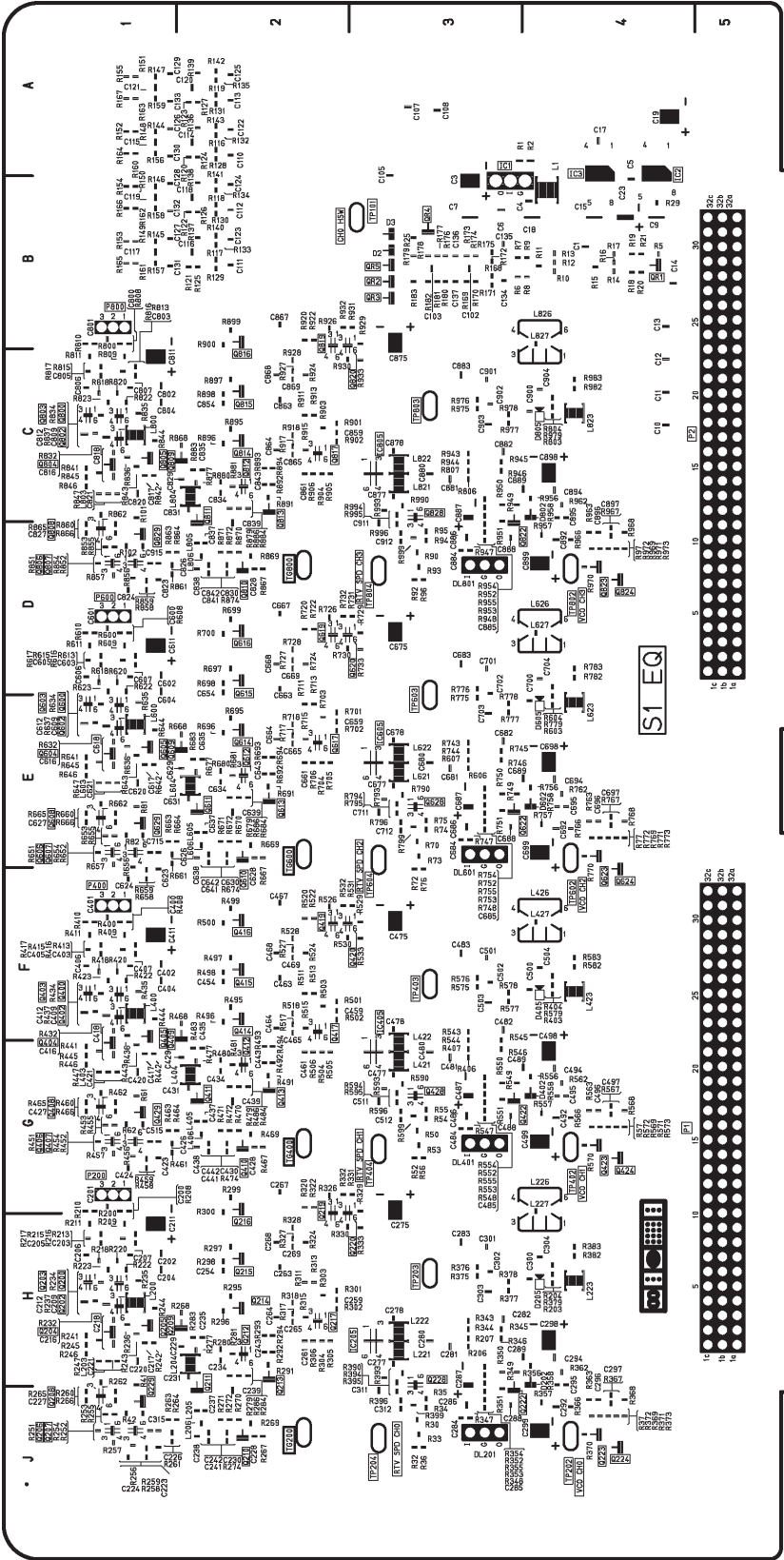
S1: EQ P.C. BOARD (VEP85198A)

S1:EQ P.C. BOARD (COMPONENT SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC1	B3	IC112	A1	IC406	G1	IC801	C1	Q3	C4	Q601	E1
IC4	B4	IC113	B3	IC407	G1	IC802	C2	Q4	C4	Q618	E2
IC5	B4	IC200	H1	IC408	G1	IC803	C2	Q5	C4	Q621	D2
IC6	A5	IC201	H1	IC409	F1	IC804	C2	Q6	C4	Q625	D4
IC7	A5	IC202	H2	IC410	G4	IC806	C1	Q7	C4	Q626	E3
IC8	A4	IC203	H2	IC411	G3	IC807	C1	Q8	C4	Q627	E3
IC9	A4	IC204	H2	IC600	D1	IC808	D1	Q201	H1	Q801	C1
IC101	A3	IC206	H1	IC601	D1	IC809	C1	Q218	H2	Q818	C2
IC102	B3	IC207	H1	IC602	E2	IC810	C4	Q221	H2	Q821	C2
IC103	A2	IC208	J1	IC603	E2	IC811	D3	Q225	H4	Q825	C4
IC104	B2	IC209	H1	IC604	D2	P1	G5	Q226	H3	Q826	C3
IC105	A2	IC210	H4	IC606	E1	P2	G5	Q227	H3	Q827	C3
IC106	A2	IC211	J3	IC607	E1	P200	G1	Q401	F1	Q86	B3
IC107	A2	IC400	F1	IC608	E1	P400	F1	Q418	G2	TP602	E4
IC108	A2	IC401	F1	IC609	E1	P600	D1	Q421	F2	TP603	E3
IC109	A1	IC402	G2	IC610	E4	P800	B1	Q425	F4	TP604	E3
IC110	B1	IC403	F2	IC611	E3	Q1	B4	Q426	F3	TP800	C1
IC111	B1	IC404	F2	IC800	C1	Q2	B4	Q427	G3	TP801	C3



S1: EQ P.C. BOARD (VEP85198A)

S1:EQ P.C. BOARD (FOIL SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2	A4	Q210	J2	Q400	F1	Q416	F2	Q607	E1	Q624	F4
IC2	A4	Q211	J2	Q402	F1	Q417	F2	Q608	E1	Q628	E3
IC205	H3	Q212	H2	Q403	F1	Q419	F2	Q609	E2	Q629	E1
IC405	G3	Q213	H2	Q404	G1	Q420	F2	Q610	E2	Q630	C1
IC605	E3	Q214	H2	Q405	G1	Q422	G3	Q611	E2	Q632	C1
IC805	C3	Q215	H2	Q406	G1	Q423	G4	Q612	E2	Q633	C1
Q200	H1	Q216	H2	Q407	G1	Q424	G1	Q613	E2	Q634	C1
Q202	H1	Q217	H2	Q408	G1	Q428	G3	Q614	D2	Q635	C1
Q203	H1	Q219	H2	Q409	G2	Q429	G1	Q615	D2	Q636	C1
Q204	H1	Q220	H2	Q410	G2	Q600	E1	Q616	D2	Q637	D1
Q205	H1	Q222	J3	Q411	G2	Q602	E1	Q617	E2	Q638	D1
Q206	J1	Q223	J4	Q412	G2	Q603	E1	Q619	D2	Q639	C2
Q207	J1	Q224	J4	Q413	G2	Q604	E1	Q620	D2	Q640	B4
Q208	J1	Q228	J3	Q414	F2	Q605	E1	Q622	E3	Q641	C2
Q209	H2	Q229	J1	Q415	F2	Q606	E1	Q623	E4	Q642	B3

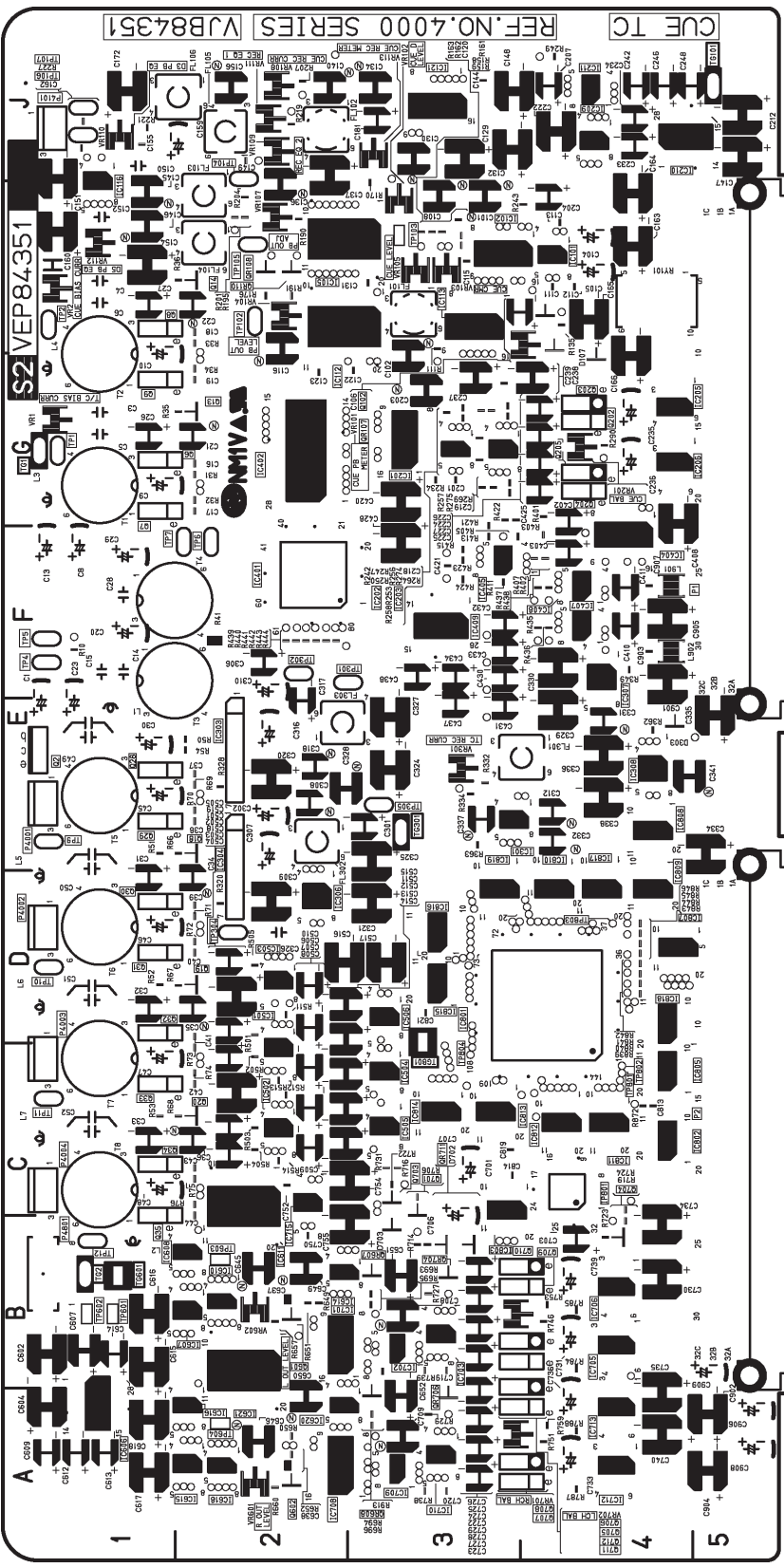


(FOIL SIDE)

S2: CUE/TC P.C. BOARD (VEP84351A)

S1: CUE/TC P.C. BOARD (COMPONENT SIDE)

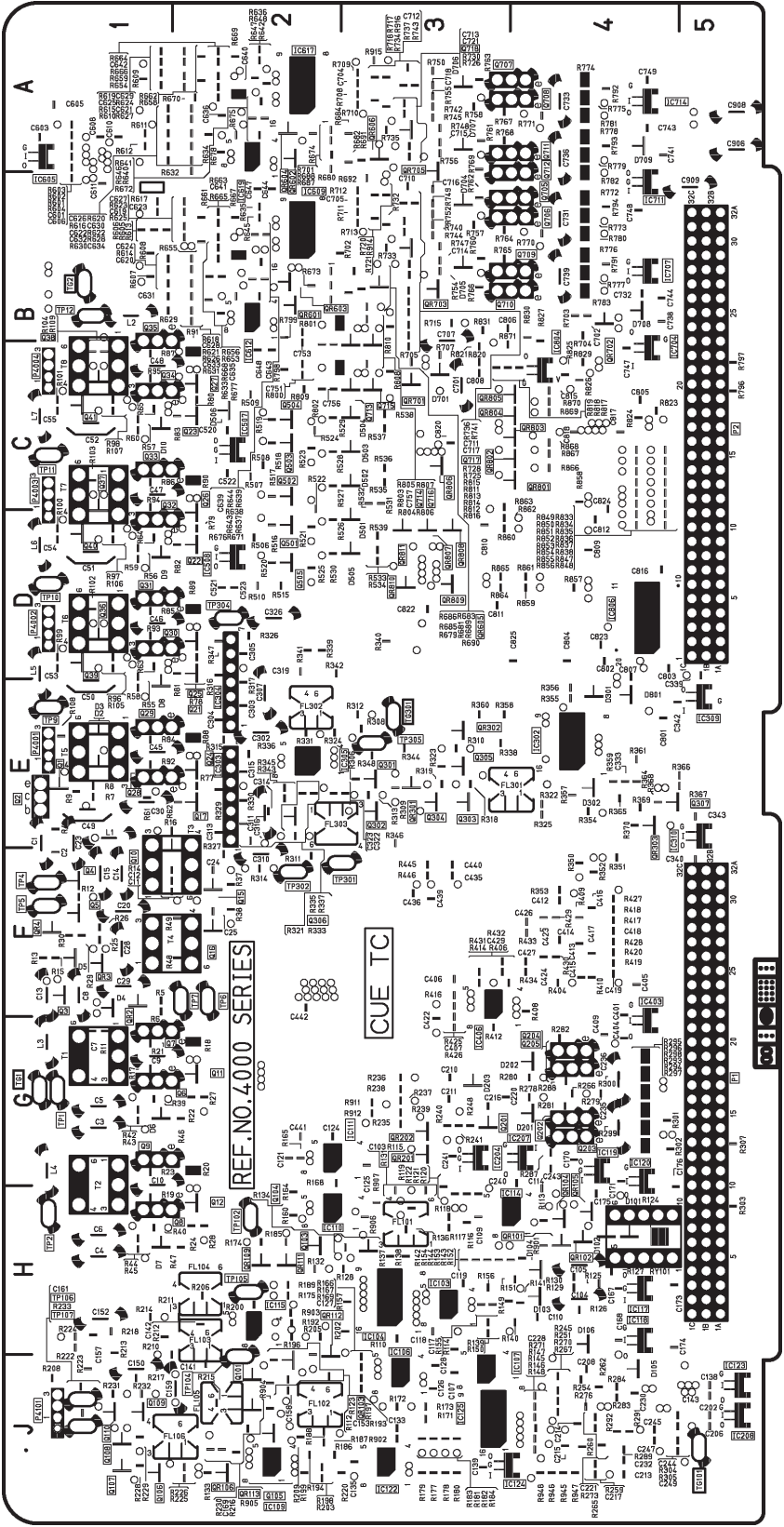
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC4101	H4	IC4306	D2	IC4608	B2	IC4713	A4	IC4819	D3	Q4019	D2	Q4703	C3	TP4104	G1	TP4105	J2
IC4102	H4	IC4307	F4	IC4610	B2	IC4715	C2	IP4801	C2	Q4020	C2	Q4704	B4	TP4105	H2	VR4107	H2
IC4105	H2	IC4308	E4	IC4611	C2	IC4801	D4	P1	G5	Q4028	E1	Q4705	B3	TP4106	J5	VR4108	J2
IC4112	H2	IC4401	F2	IC4614	B2	IC4802	C4	P2	C5	Q4029	E1	Q4706	B3	TP4107	E3	VR4109	J2
IC4113	H3	IC4402	G2	IC4615	A2	IC4803	C3	P4001	C3	Q4030	D1	Q4707	A3	TP4301	F2	VR4110	J1
IC4116	J1	IC4404	F4	IC4616	A2	IC4805	C4	P4002	C4	Q4031	D1	Q4708	A3	TP4302	F2	VR4111	J2
IC4121	J3	IC4405	F3	IC4618	A2	IC4807	D4	P4003	C1	Q4032	D1	Q4709	B3	TP4304	D2	VR4112	H1
IC4201	G3	IC4407	F4	IC4620	A2	IC4808	E4	P4004	C1	Q4033	C1	Q4710	B3	TP4305	E3	VR4113	J3
IC4202	G3	IC4408	F4	IC4621	B2	IC4809	D4	P4101	J1	Q4034	C1	Q4711	A3	TP4304	F1	VR4201	G4
IC4203	G3	IC4409	F3	IC4701	B2	IC4810	D4	P4801	B1	Q4035	C1	Q4712	B3	TP4602	B1	VR4301	E3
IC4205	G4	IC4501	C2	IC4702	B1	IC4811	C2	Q4002	E1	Q4102	H4	Q4710	H4	TP4603	B2	VR4601	A2
IC4206	G4	IC4502	C2	IC4703	B3	IC4812	C4	Q4006	G1	Q4202	G4	Q4707	H2	TP4604	A2	VR4602	B2
IC4209	J4	IC4503	D2	IC4705	B4	IC4813	C3	Q4007	G1	Q4203	G4	Q4708	H2	TP4604	E1	VR4701	A3
IC4210	J4	IC4504	C3	IC4706	B4	IC4814	C3	Q4008	H1	Q4204	G4	Q4709	H1	TP4604	G1	VR4702	B3
IC4211	J4	IC4505	C3	IC4708	A2	IC4815	A2	Q4009	G3	Q4205	G4	Q4708	H3	TP4604	C1	VR4101	H3
IC4301	E3	IC4506	D3	IC4709	A3	IC4816	A3	Q4013	G2	Q4601	B2	Q4704	B1	TP4102	H3		
IC4303	E2	IC4606	A1	IC4710	A3	IC4817	D4	Q4014	H2	Q4602	A2	Q4706	A3	TP4102	H2	VR4103	H3
IC4304	E2	IC4607	B2	IC4712	A4	IC4818	D4	Q4018	E2	Q4701	C3	Q4711	C3	TP4103	H3	VR4104	H2



(COMPONENT SIDE)

S2: CUE/TC P.C. BOARD (VEP84351A)

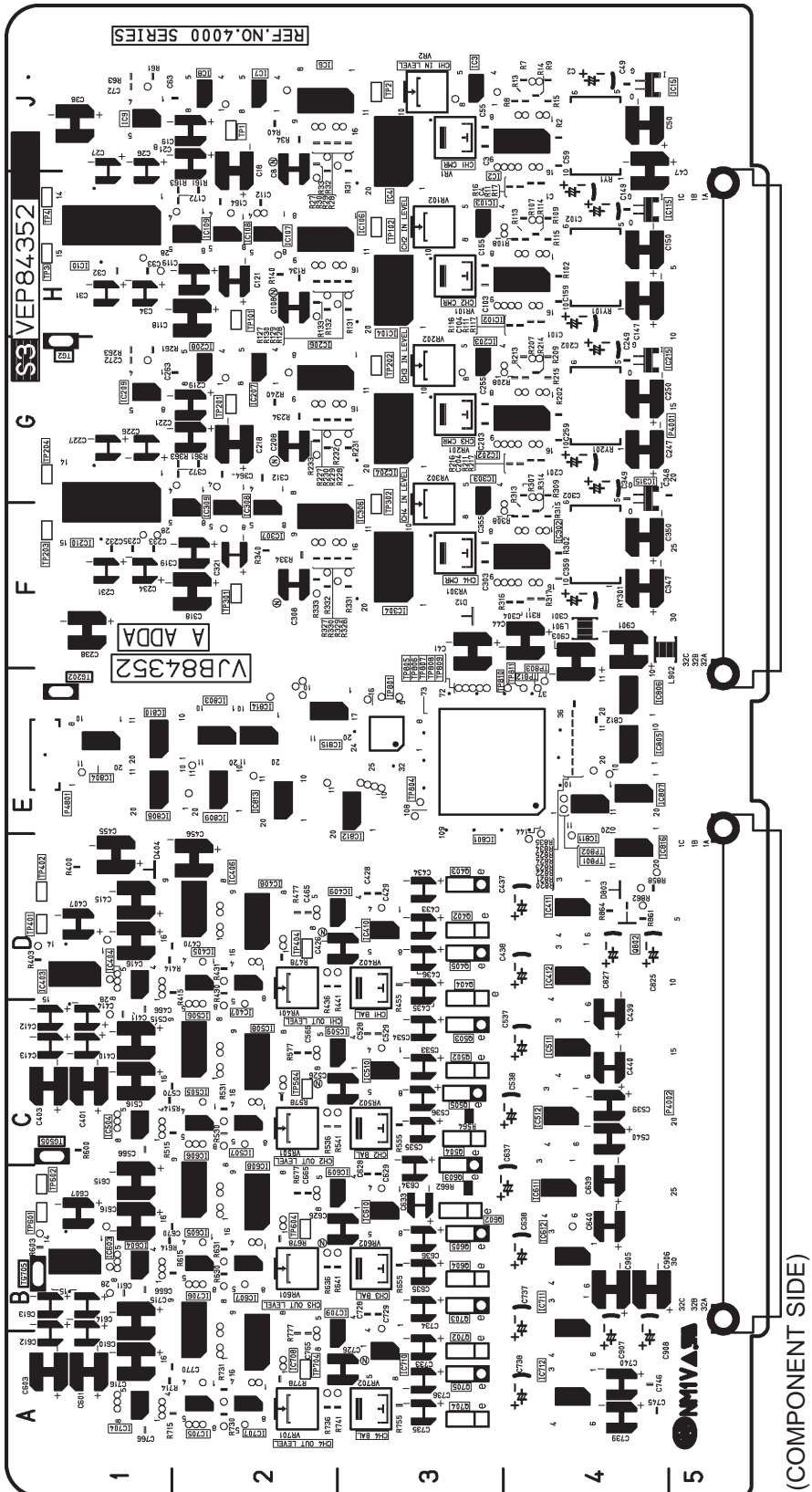
S2: CUE/TC P.C. BOARD (FOIL SIDE)															
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC4103	H3	IC4207	G4	IC4714	A4	Q4026	D2	Q4301	E3	QR4004	F1	QR4603	B2	QR4811	D3
IC4104	H3	IC4208	J5	IC4804	C4	Q4027	C2	Q4302	E3	QR4101	H4	QR4604	A2		
IC4106	J3	IC4302	E4	IC4806	D4	Q4036	D1	Q4303	E3	QR4102	H4	QR4605	B3		
IC4107	J3	IC4305	E2	Q4001	E1	Q4037	D1	Q4304	E3	QR4103	J2	QR4606	A3		
IC4109	J2	IC4309	E5	Q4003	F1	Q4038	C1	Q4305	E3	QR4104	H4	QR4701	C3		
IC4110	H2	IC4310	E5	Q4004	F1	Q4039	D1	Q4306	E2	QR4105	H4	QR4702	B4		
IC4111	G2	IC4403	G4	Q4005	F1	Q4040	D1	Q4307	E5	QR4106	J2	QR4703	B3		
IC4114	H4	IC4406	F3	Q4010	F2	Q4041	C1	Q4501	D2	QR4109	H2	QR4705	A3		
IC4115	H2	IC4507	C2	Q4011	G2	Q4101	J2	Q4502	C2	QR4111	H2	QR4801	C4		
IC4117	H4	IC4508	D2	Q4012	H2	Q4103	H3	Q4503	C2	QR4112	J2	QR4802	C4		
IC4118	H4	IC4605	A1	Q4015	F2	Q4104	H2	Q4504	C2	QR4113	J2	QR4803	C4		
IC4119	G4	IC4609	B2	Q4016	F2	Q4105	J2	Q4505	D2	QR4201	G3	QR4804	C4		
IC4120	G4	IC4612	B2	Q4017	E2	Q4106	J1	Q4714	C3	QR4202	G3	QR4805	C3		
IC4122	J3	IC4617	A2	Q4021	D2	Q4107	J1	Q4717	B3	QR4301	E3	QR4806	C3		
IC4123	J5	IC4619	A2	Q4022	D2	Q4108	J1	Q4718	A3	QR4302	E3	QR4807	D3		
IC4124	J4	IC4704	C4	Q4023	C2	Q4109	J1	Q4718	A3	QR4303	E4	QR4808	D3		
IC4125	J3	IC4707	B4	Q4024	E2	Q4110	J1	QR4002	F1	QR4601	B2	QR4809	D3		
IC4204	G3	IC4711	B4	Q4025	D2	Q4201	G3	QR4003	F1	QR4602	A2	QR4810	D3		



(FOIL SIDE)

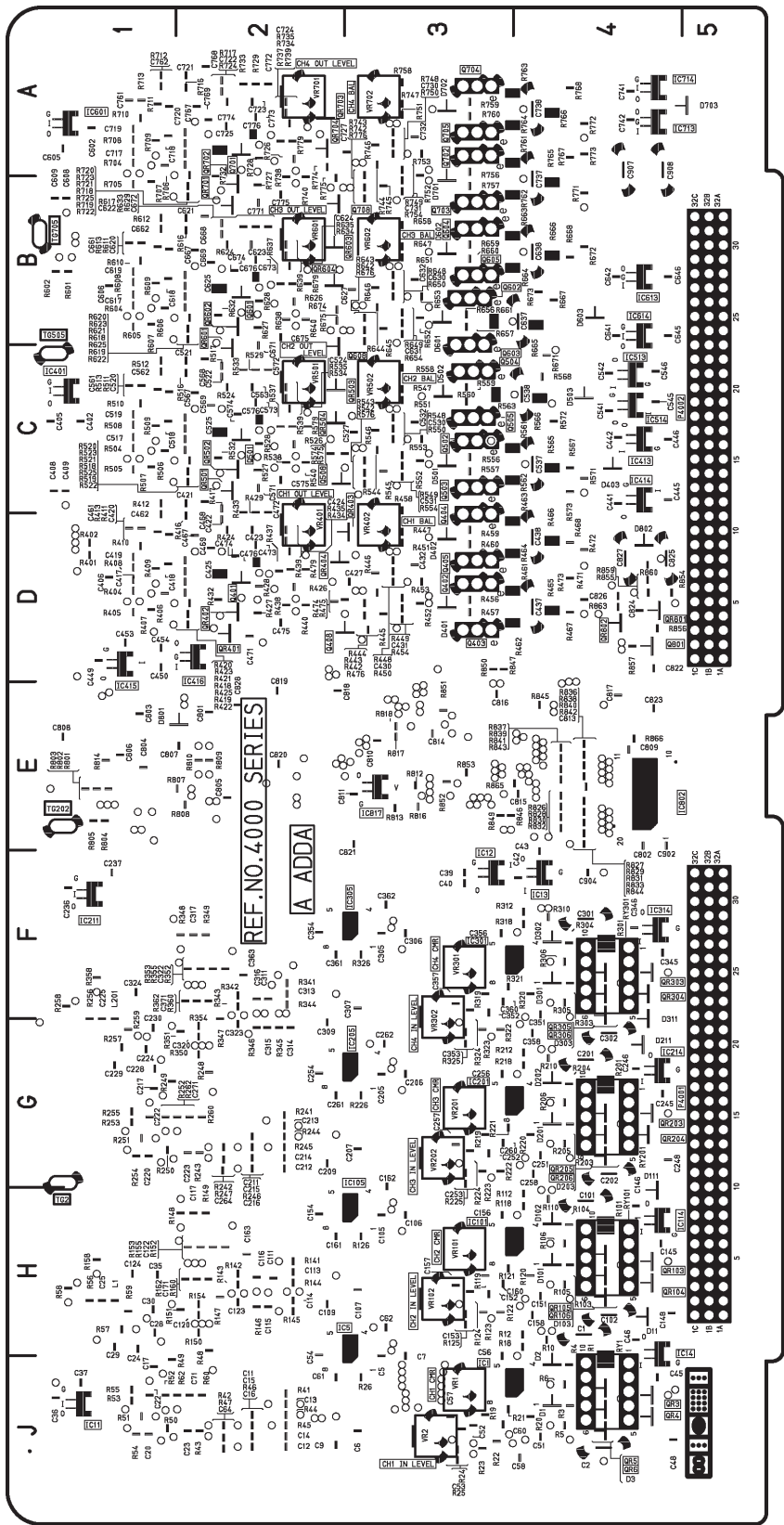
S3: A ADDA P.C. BOARD (VEP84352A)

S3: A ADDA P.C. BOARD (COMPONENT SIDE)															
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC4002	J4	IC4203	G3	IC4405	D2	IC4604	B1	IC4801	E3	P4801	E1	IG4002	G1	TP4404	D2
IC4003	J3	IC4204	G3	IC4406	D2	IC4605	B2	IC4803	E2	Q4402	D3	IG4202	E1	TP4504	C2
IC4004	J3	IC4206	G2	IC4407	D2	IC4606	B2	IC4804	E1	Q4403	D3	IG4505	C1	TP4601	B1
IC4006	J2	IC4207	G2	IC4408	D2	IC4607	B2	IC4805	E4	Q4404	C3	IG4705	B1	TP4602	B1
IC4007	J2	IC4208	G2	IC4409	D2	IC4608	B2	IC4806	E4	Q4405	D3	TP4001	J2	TP4604	B2
IC4008	J2	IC4209	G1	IC4410	D3	IC4609	B2	IC4807	E4	Q4502	C3	TP4704	A2	TP4704	A2
IC4009	J1	IC4210	F1	IC4411	D4	IC4610	B3	IC4808	E1	Q4503	C3	TP4003	H1	VR4001	J3
IC4010	H1	IC4215	G4	IC4412	D4	IC4611	B4	IC4809	E2	Q4504	C3	TP4004	H1	VR4002	J3
IC4015	J4	IC4302	F4	IC4504	C1	IC4612	B4	IC4810	E1	Q4505	C3	TP4101	H2	VR4101	H3
IC4102	H3	IC4303	F3	IC4505	C2	IC4704	A1	IC4811	E4	Q4602	B3	TP4102	H3	VR4102	H3
IC4103	H3	IC4304	F3	IC4506	C2	IC4705	A2	IC4812	E3	Q4603	B3	TP4201	G2	VR4201	G3
IC4104	H3	IC4306	F2	IC4507	C2	IC4706	A2	IC4813	E2	Q4604	B3	TP4202	G3	VR4202	G3
IC4106	H2	IC4307	F2	IC4508	C2	IC4707	A2	IC4814	E2	Q4605	B3	TP4203	F1	VR4301	F3
IC4107	H2	IC4308	F2	IC4509	C2	IC4708	A2	IC4815	E2	Q4702	A3	TP4204	G1	VR4302	F3
IC4108	H2	IC4309	F2	IC4510	C3	IC4709	A2	IC4816	D4	Q4703	B3	TP4301	F2	VR4401	D2
IC4109	H2	IC4315	F4	IC4511	C4	IC4710	A3	IP4801	E3	Q4704	A3	TP4302	F3	VR4402	D3
IC4115	H4	IC4403	D1	IC4512	C4	IC4711	A4	P4001	G5	Q4705	A3	TP4401	D1	VR4501	C2
IC4202	G4	IC4404	D1	IC4603	B1	IC4712	A4	P4002	C5	Q4802	D4	TP4402	D1	VR4502	C3



S3: A ADDA P.C. BOARD (VEP84352A)

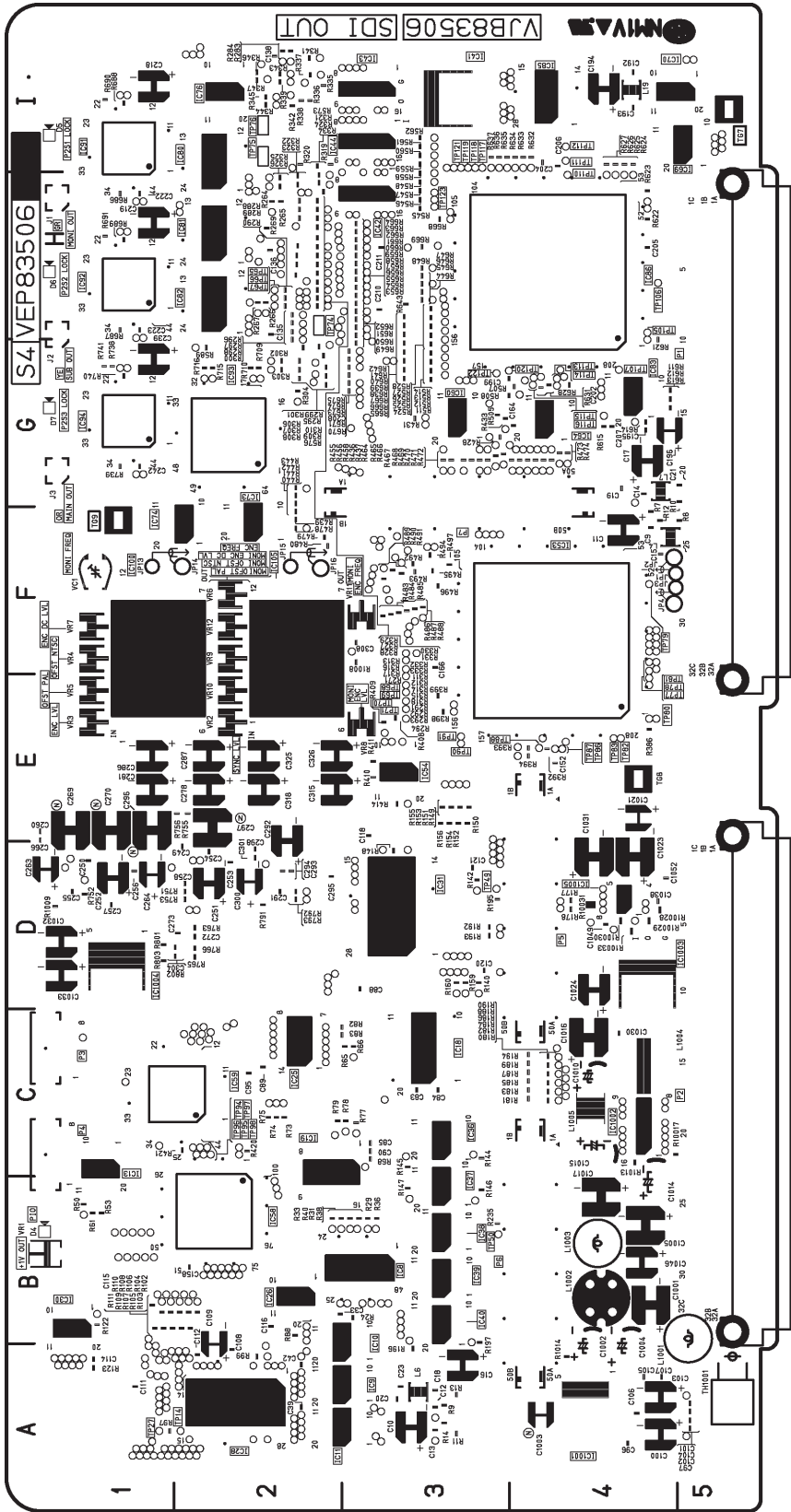
S3::A ADDA P.C. BOARD (FOIL SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC4001	J3	IC4414	C4	Q4701	A2	QR4306	F4	QR4802	D4		
IC4005	H3	IC4415	D1	Q4708	B2	QR4401	D2				
IC4011	J1	IC4416	D2	Q4801	D4	QR4402	D2				
IC4012	F3	IC4513	C4	QR4003	J4	QR4403	D3				
IC4013	F4	IC4514	C4	QR4004	J4	QR4404	D2				
IC4014	H4	IC4601	A1	QR4005	J4	QR4501	C2				
IC4101	H3	IC4613	B4	QR4006	J4	QR4502	C2				
IC4105	H3	IC4614	B4	QR4103	H4	QR4503	C2				
IC4114	H4	IC4713	A4	QR4104	H4	QR4504	C2				
IC4201	G3	IC4714	A4	QR4105	H4	QR4601	C2				
IC4205	G3	IC4802	E4	QR4106	H4	QR4602	B2				
IC4211	F1	IC4817	E3	QR4203	G4	QR4603	B2				
IC4214	G4	Q4401	D2	QR4204	G4	QR4604	B2				
IC4301	F3	Q4408	D2	QR4205	G4	QR4701	B2				
IC4305	F3	Q4501	C2	QR4206	G4	QR4702	B2				
IC4314	F4	Q4508	C2	QR4303	F4	QR4703	A2				
IC4401	C1	Q4601	B2	QR4304	F4	QR4704	A2				
IC4413	C4	Q4608	C2	QR4305	F4	QR4801	D4				



(FOIL SIDE)

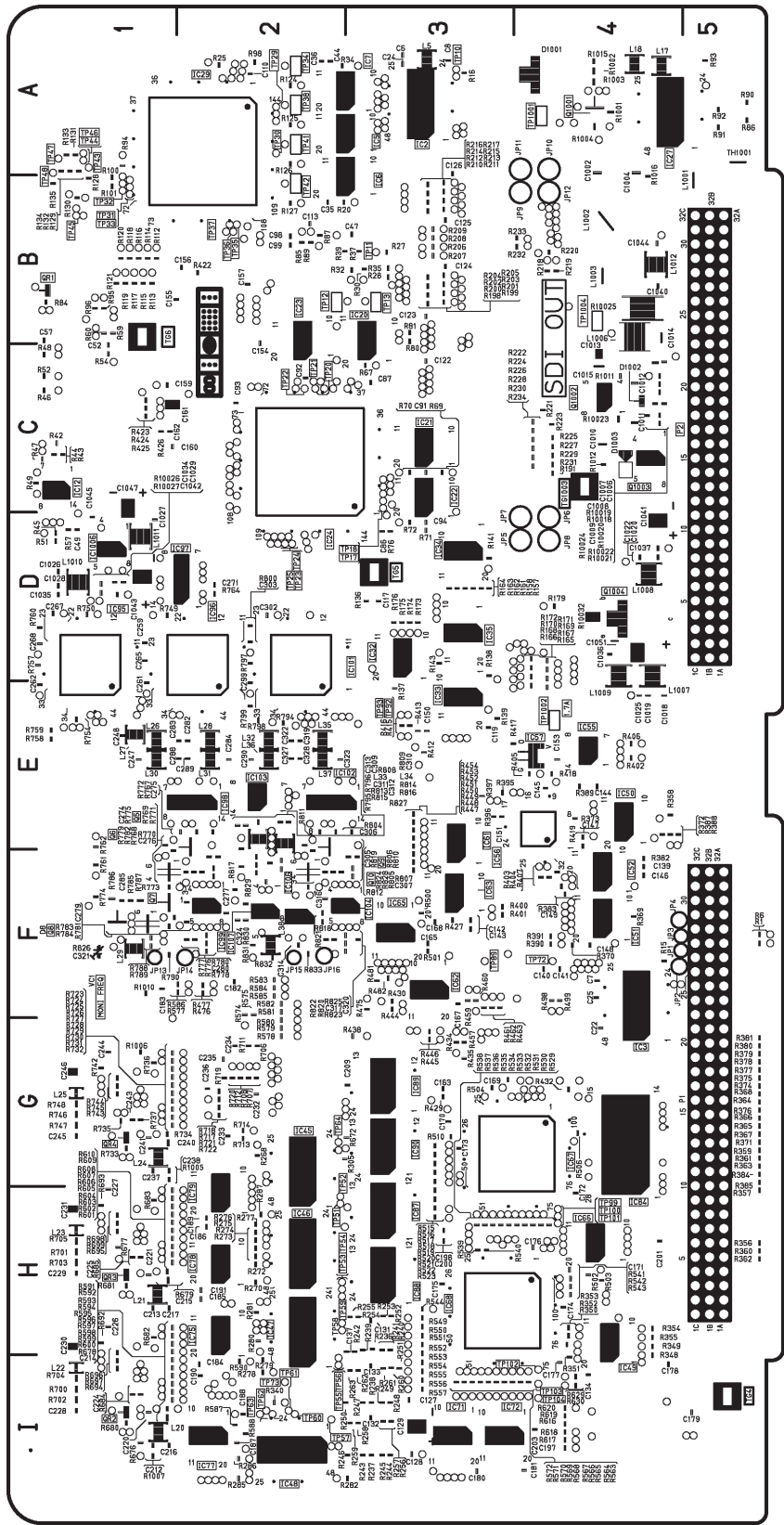
S4: SDI OUT P.C. BOARD (VEP83506A)

S4: SDI OUT P.C. BOARD (COMPONENT SIDE)									
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC8	B3	IC42	H3	IC86	H4	P7	G3	VR11	F3
IC9	A3	IC43	I3	IC91	I1	TG7	I5	VR12	F2
IC10	B3	IC44	J3	IC92	H1	TG8	E4		
IC11	A3	IC53	F4	IC93	G2	TG9	F1		
IC13	C1	IC54	E3	IC94	G1	TH1001	A5		
IC18	C3	IC58	B2	IC100	F1	TP74	H2		
IC19	C2	IC60	G3	IC105	F2	TP75	I2		
IC25	G2	IC64	G4	IC1001	A4	TP76	I2		
IC26	B2	IC69	I5	IC1002	C4	VR1	B1		
IC28	A2	IC70	I4	IC1003	D4	VR2	E2		
IC30	B1	IC73	F2	IC1004	D1	VR3	E1		
IC31	D3	IC74	F2	IC1005	D4	VR4	F1		
IC36	C3	IC76	I2	P1	G5	VR5	E1		
IC37	B3	IC80	I2	P2	C5	VR6	F2		
IC38	B3	IC81	H2	P3	C1	VR7	F1		
IC39	B3	IC82	H2	P4	C1	VR8	E3		
IC40	B3	IC83	G4	P5	D4	VR9	F2		
IC41	I3	IC85	I4	P6	B4	VR10	E2		



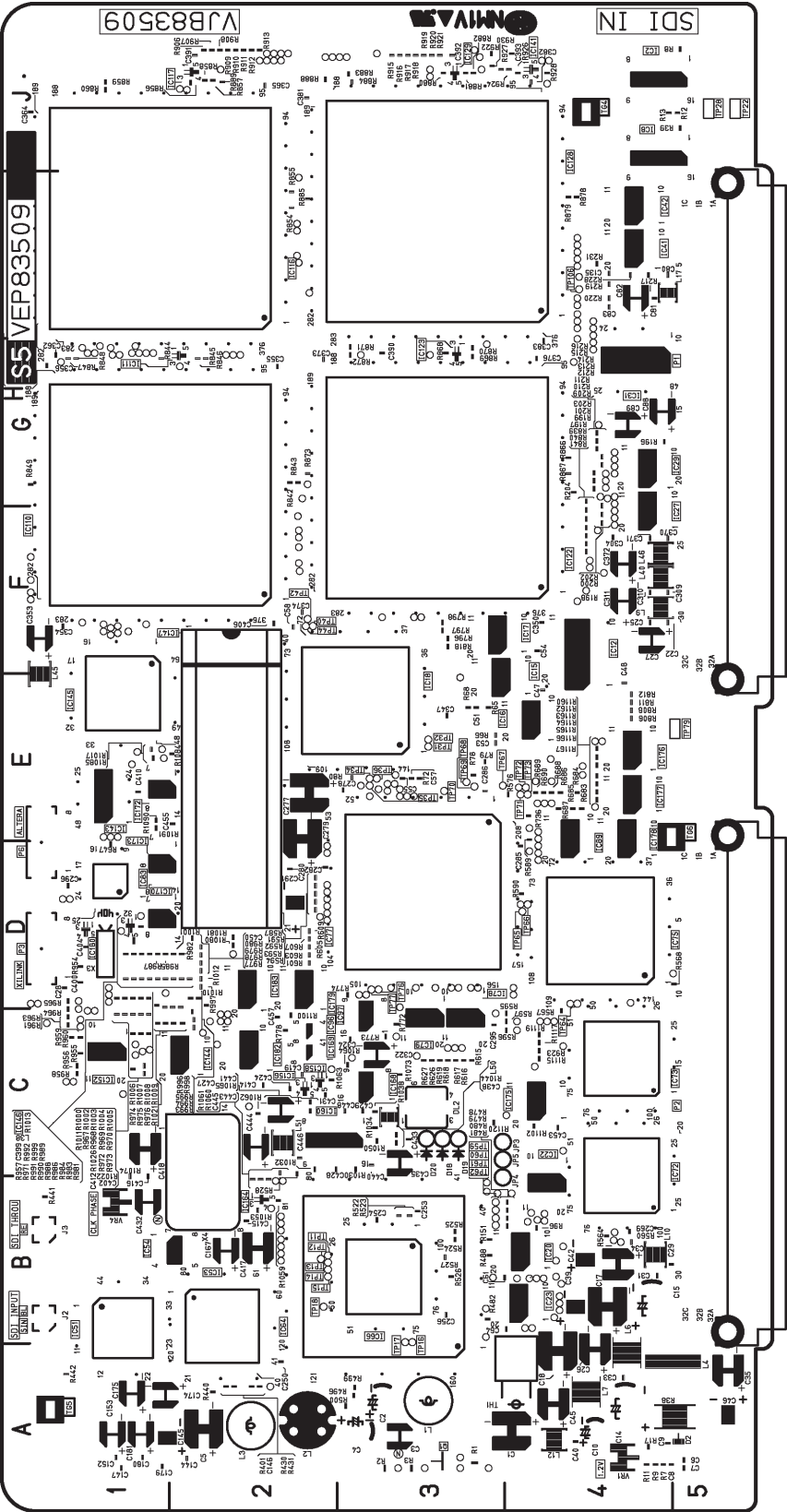
S4: SDI OUT P.C. BOARD (VEP83506A)

S4: SDIOUT P.C. BOARD (FOIL SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC 2	A3	IC 46	H2	IC 72	I3	IC 1006	D1	TG1003	C 4		
IC 3	A4	IC 47	H2	IC 75	H2	IC 1005	E2	TP12	B2		
IC 5	A3	IC 48	I2	IC 77	I2	IC 1006	F1	TP13	B3		
IC 6	A3	IC 49	H4	IC 78	H2	IC 1007	F1	TP34	A2		
IC 7	A3	IC 50	H2	IC 79	H2	IC 1008	F1	TP38	A2		
IC 10	C1	IC 51	F4	IC 84	G4	IC 1009	F2	TP41	A2		
IC 20	B3	IC 52	F4	IC 87	H3	IC 1010	F2	TP42	B2		
IC 21	C3	IC 55	E4	IC 88	H3	IC 1001	A4	TP1001	A4		
IC 22	C3	IC 56	E4	IC 89	G3	IC 1002	C4	TP1002	E4		
IC 23	B2	IC 57	E4	IC 90	G3	IC 1003	C4	TP1004	B4		
IC 24	C2	IC 61	E3	IC 95	D1	IC 1004	D4				
IC 27	A4	IC 62	F3	IC 96	D2	IC 1004	B1				
IC 29	A2	IC 63	F3	IC 97	D2	IC 1004	I1				
IC 32	D3	IC 65	F3	IC 98	E2	IC 1004	H1				
IC 33	E3	IC 66	H4	IC 99	F2	IC 1004	G1				
IC 34	D3	IC 67	G4	IC 101	D2	IC 1004	I5				
IC 35	D3	IC 68	H3	IC 102	E2	IC 1004	D3				
IC 45	G2	IC 71	I3	IC 104	F3	IC 1004	B1				



S5: SDI IN P.C. BOARD
(VEP83509B:AJ-HD3700HP/VEP83509C:AJ-HD3700HE)

S5:SDI IN P.C. BOARD (COMPONENT SIDE)											
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2	J4	IC64	B3	IC129	J3	IC177	E4	VR1	A4		
IC8	J4	IC72	J4	IC141	E4	IC178	E4	VR4	B1		
IC12	F4	IC73	C4	IC143	E1	IC179	D2	X3	D1		
IC15	E3	IC75	D4	IC144	C2	IC180	D1	X4	C2		
IC16	E4	IC77	D3	IC145	E1	IC182	C2				
IC17	F3	IC78	C3	IC146	D1	IC183	D2				
IC18	E3	IC79	C3	IC147	F2	P1	G5				
IC20	B4	IC83	D1	IC152	C1	P2	C5				
IC22	B4	IC89	E4	IC156	C2	P3	D1				
IC23	B4	IC96	C2	IC158	C2	P6	E1				
IC27	F4	IC97	C3	IC164	B2	O1	A3				
IC29	G4	IC110	G1	IC168	C3	TG4	J4				
IC31	G4	IC111	G2	IC169	C2	TG5	A1				
IC41	H4	IC116	H1	IC170	D2	TG6	E4				
IC42	H4	IC117	J2	IC172	E2	TH1	A3				
IC51	B1	IC122	G3	IC173	D2	TP22	J5				
IC53	B1	IC123	G3	IC175	C4	TP28	J5				
IC54	B2	IC128	H3	IC176	E4	TP79	E4				

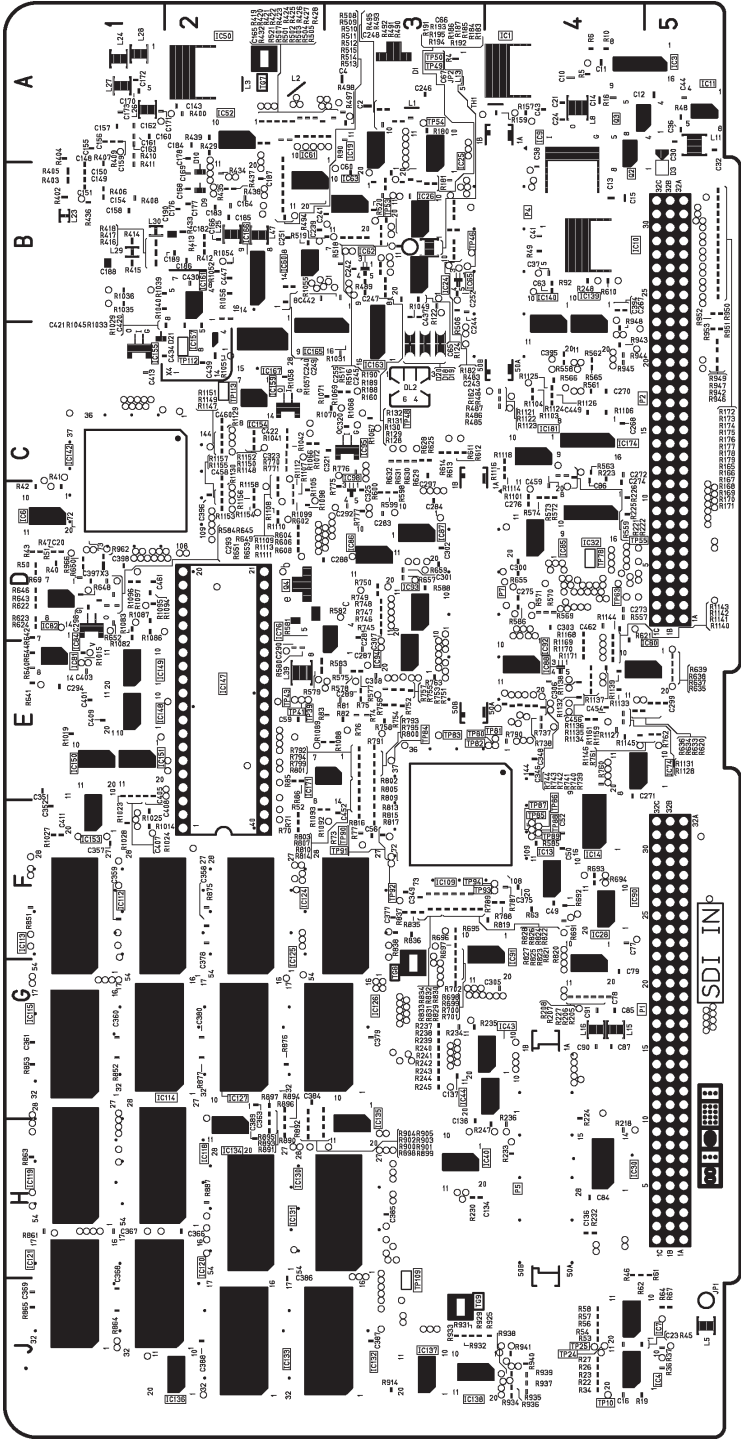


(COMPONENT SIDE)

S5: SDI IN P.C. BOARD

(VEP83509A:AJ-HD3700HP/VEP83509C:AJ-HD3700HE)

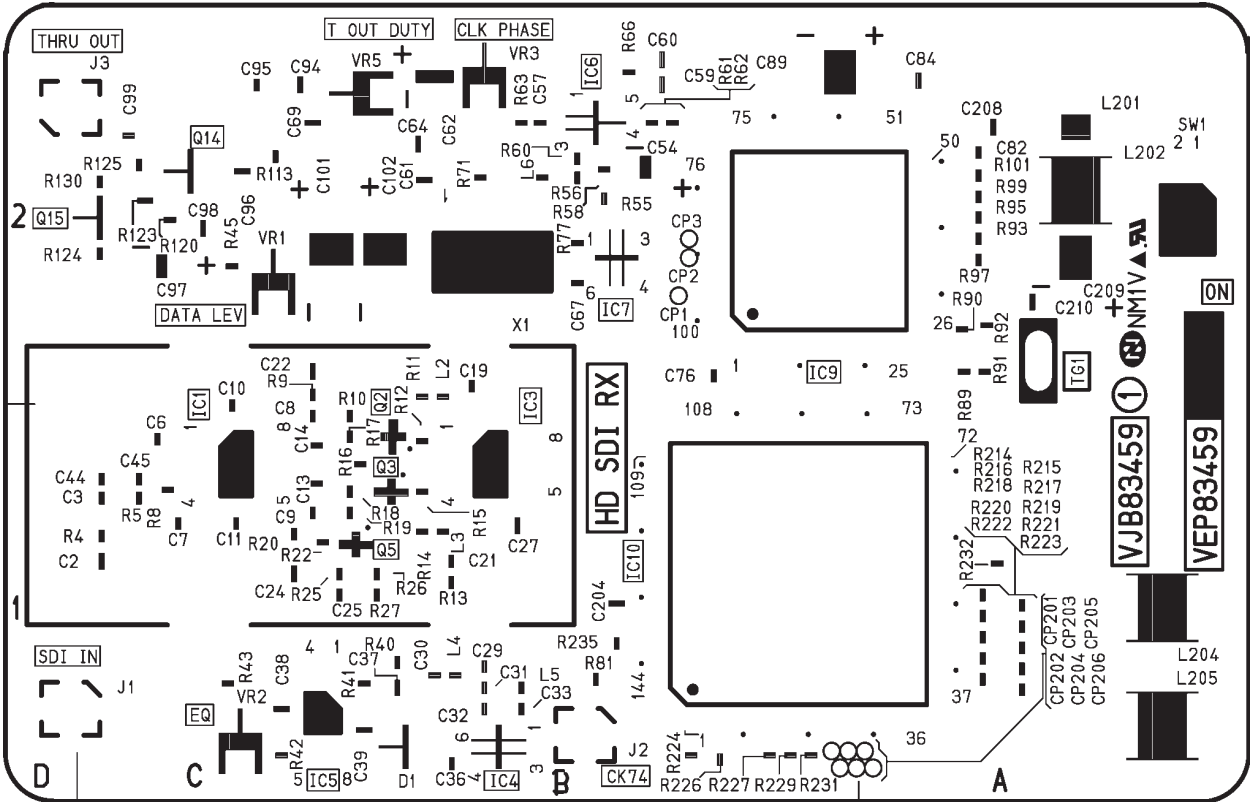
S5: SDI IN P.C. BOARD (FOIL SIDE)															
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC1	A4	IC43	G4	IC88	E4	IC125	F2	IC151	F1	TG8	G3				
IC3	A4	IC44	G4	IC90	F4	IC126	G3	IC153	F1	TG9	J3				
IC4	J4	IC50	A2	IC91	F3	IC127	G2	IC154	C2	TP78	D4				
IC6	D1	IC52	A2	IC92	E4	IC130	H3	IC155	C1	TP109	J3				
IC7	J4	IC60	B2	IC93	D3	IC131	H2	IC157	C2	TP112	C2				
IC9	B4	IC61	B2	IC94	E3	IC132	J2	IC159	C2	TP113	C2				
IC10	B4	IC62	B3	IC95	C3	IC133	J2	IC161	B2						
IC11	A5	IC63	B3	IC98	D3	IC134	H2	IC167	C2						
IC13	F4	IC65	B3	IC109	F3	IC135	H3	IC171	E3						
IC14	F4	IC74	E4	IC112	F1	IC136	J2	IC174	C4						
IC19	A3	IC76	D3	IC113	F1	IC137	J3	IC181	C4						
IC24	B3	IC80	E4	IC114	G1	IC138	J3	P4	B4						
IC25	A3	IC81	E1	IC115	G1	IC139	C4	P5	H4						
IC26	B3	IC82	D1	IC118	H1	IC140	C4	P7	D3						
IC28	G4	IC84	D1	IC119	H1	IC142	C1	Q2	A4						
IC30	H4	IC85	D4	IC120	J1	IC148	E1	Q3	A4						
IC32	D4	IC86	D3	IC121	J1	IC149	E1	Q4	D2						
IC40	H3	IC87	D3	IC124	F3	IC150	E1	TG7	A2						



(FOIL SIDE)

S5: HD SDI RX P.C. BOARD (VEP83459B)

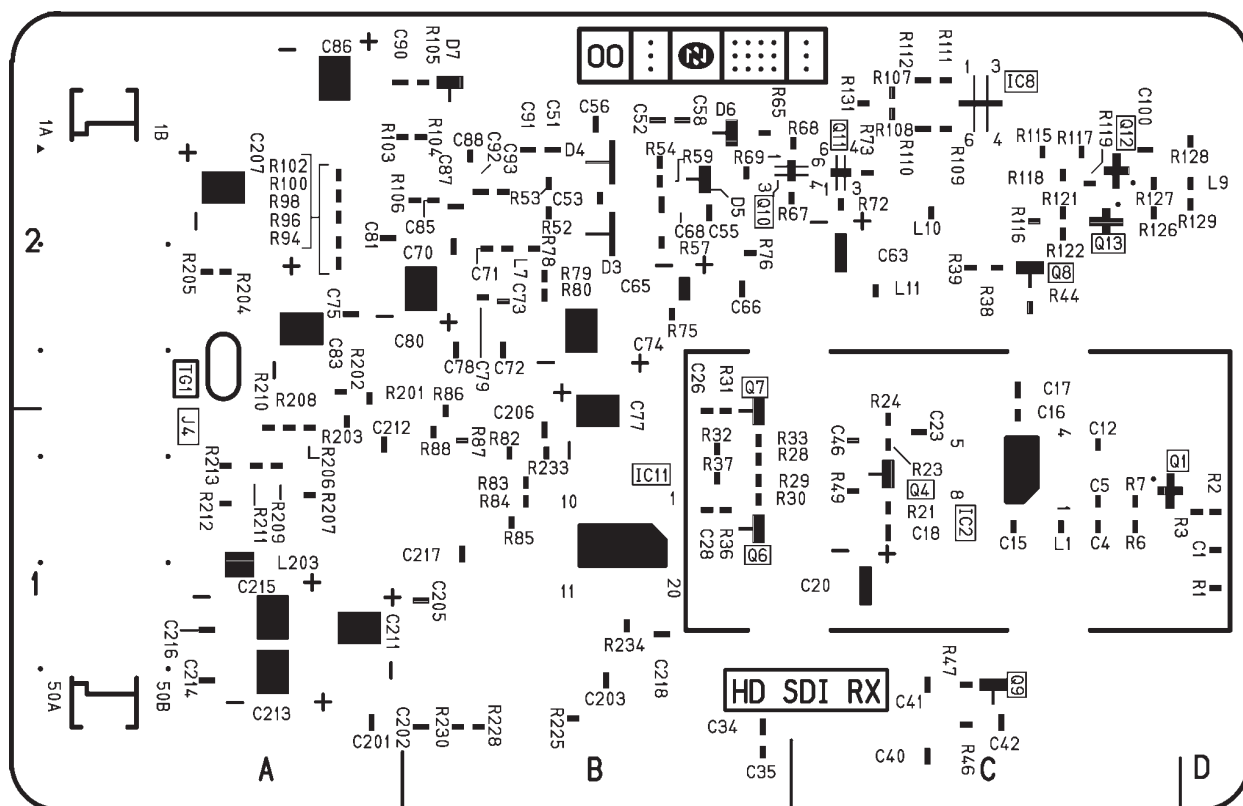
REF	LOC
CK74	B-1
IC1	C-1
IC3	B-1
IC4	B-1
IC5	C-1
IC6	B-2
IC7	B-2
IC9	B-2
IC10	B-1
Q14	C-2
Q15	D-2
Q2	C-1
Q3	C-1
Q5	C-1
TG1	A-2
VR1	C-2
VR2	C-1
VR3	B-2
VR5	C-2



(COMPONENT SIDE)

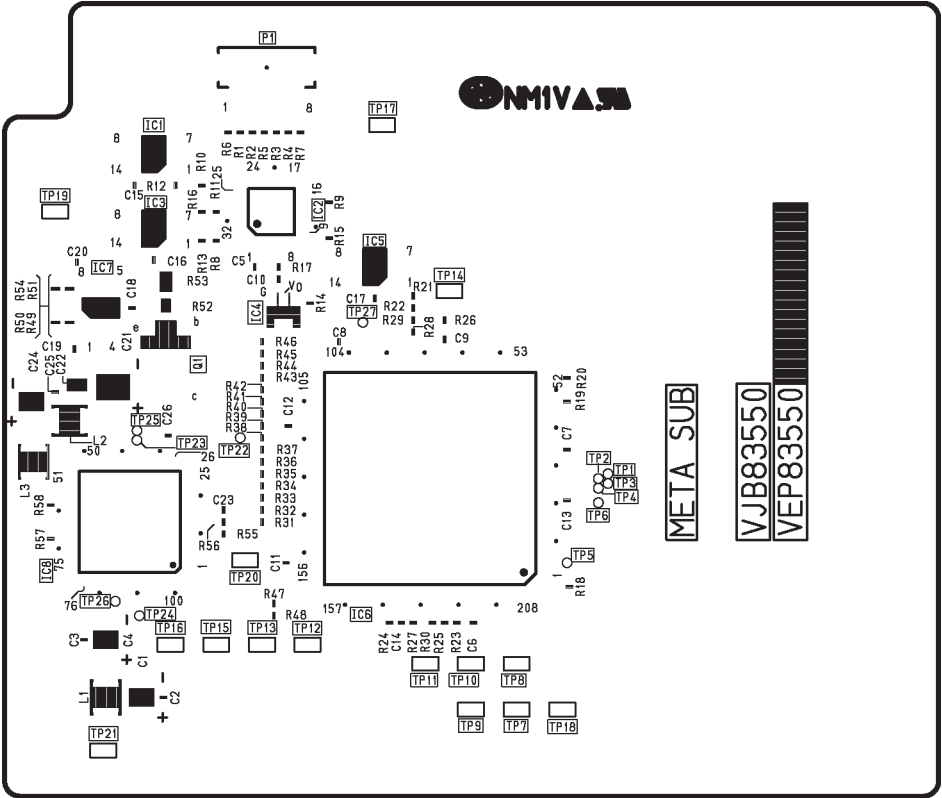
S5: HD SDI RX P.C. BOARD (VEP83459B)

REF	LOC
IC2	C-1
IC8	C-2
IC11	B-1
Q1	C-1
Q4	C-1
Q6	B-1
Q7	B-2
Q8	C-2
Q9	C-1
Q10	B-2
Q11	C-2
Q12	C-2
Q13	C-2
TG1	A-2

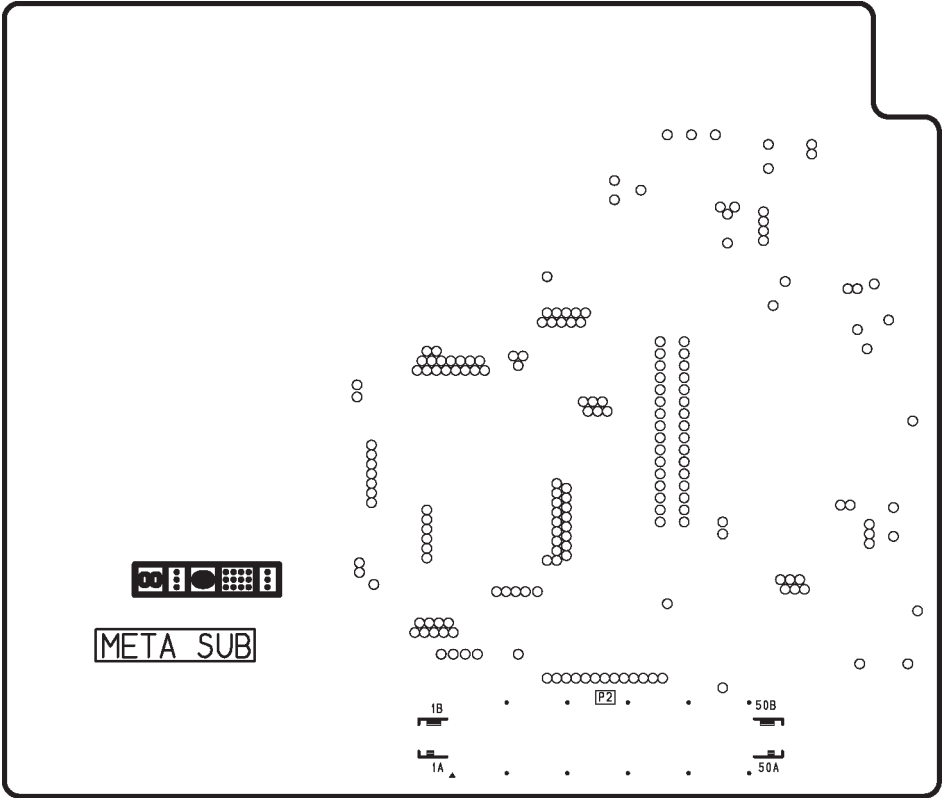


(FOIL SIDE)

S4: META SUB P.C. BOARD (VEP83550A:AJ-HD3700HP ONLY)



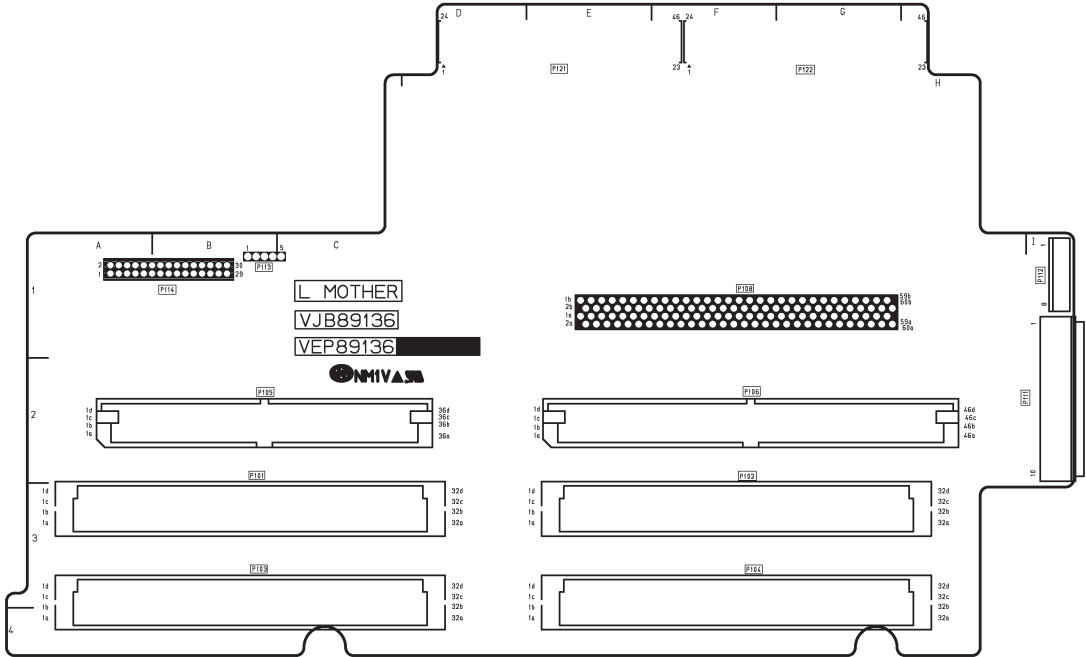
(COMPONENT SIDE)



(FOIL SIDE)

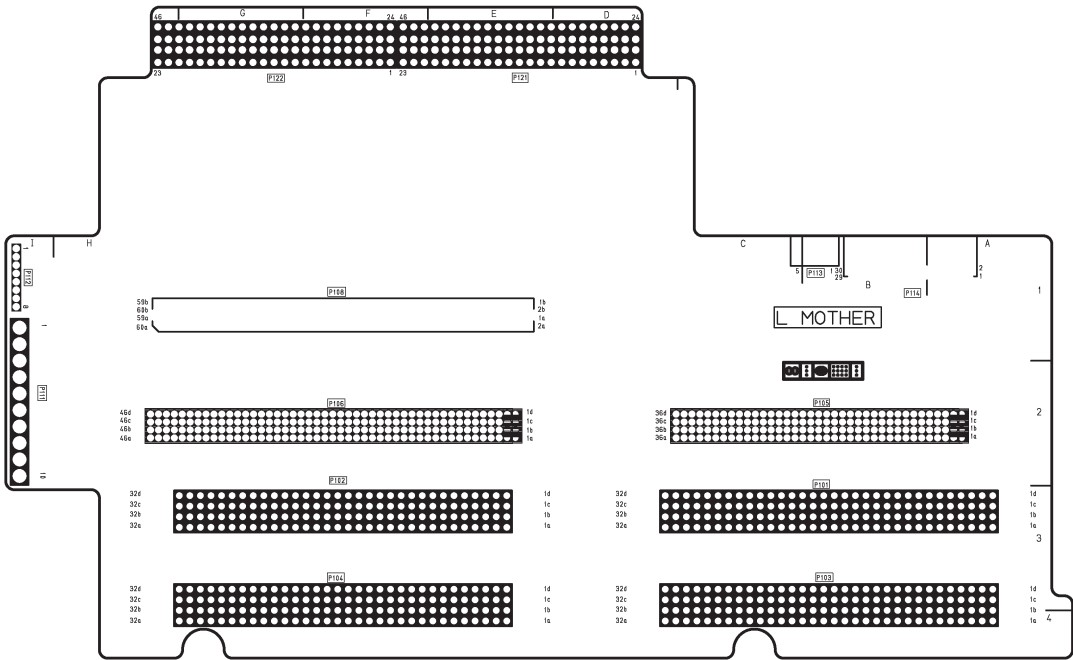
L MOTHER P.C. BOARD (VEP89136A)

L MOTHER P.C. BOARD (COMPONENT SIDE)					
REF	LOC	REF	LOC	REF	LOC
P108	F-1				
P113	B-1				
P114	B-1				



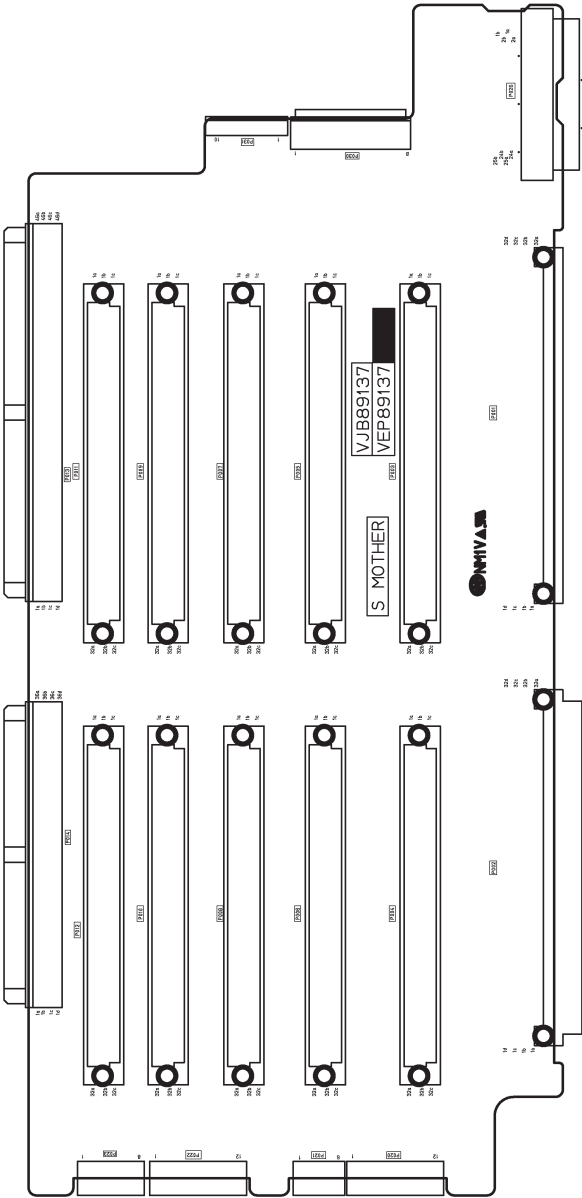
(COMPONENT SIDE)

L MOTHER P.C. BOARD (FOIL SIDE)					
REF	LOC	REF	LOC	REF	LOC
P101	B-3	P104	F-3	P111	I-2
P102	F-3	P105	B-2	P112	I-1
P103	B-3	P106	F-2		

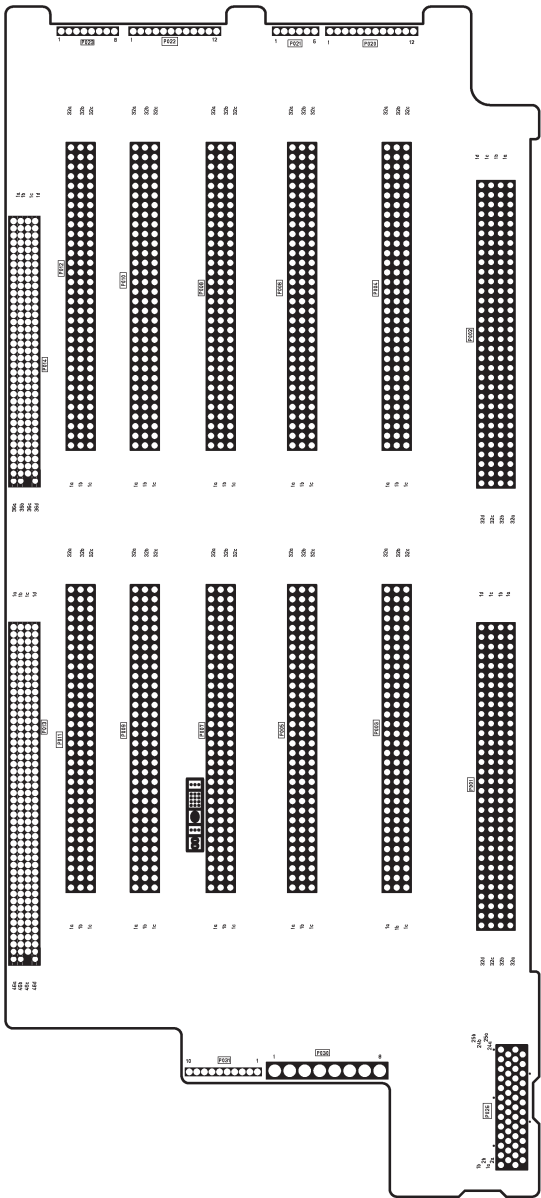


(FOIL SIDE)

S MOTHER P.C. BOARD (VEP89137A)

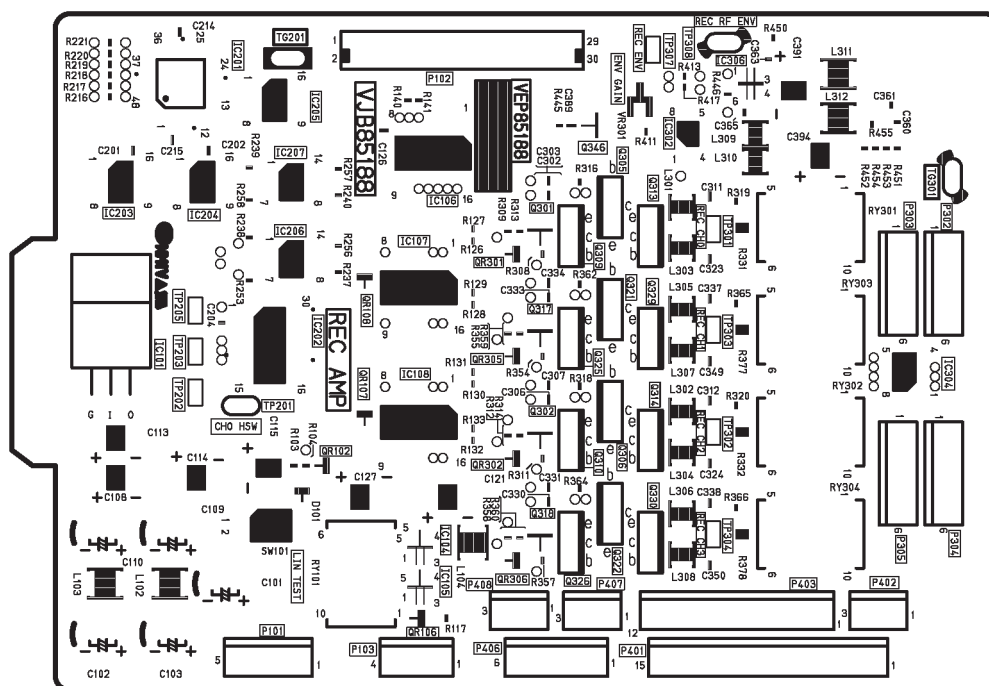


(COMPONENT SIDE)

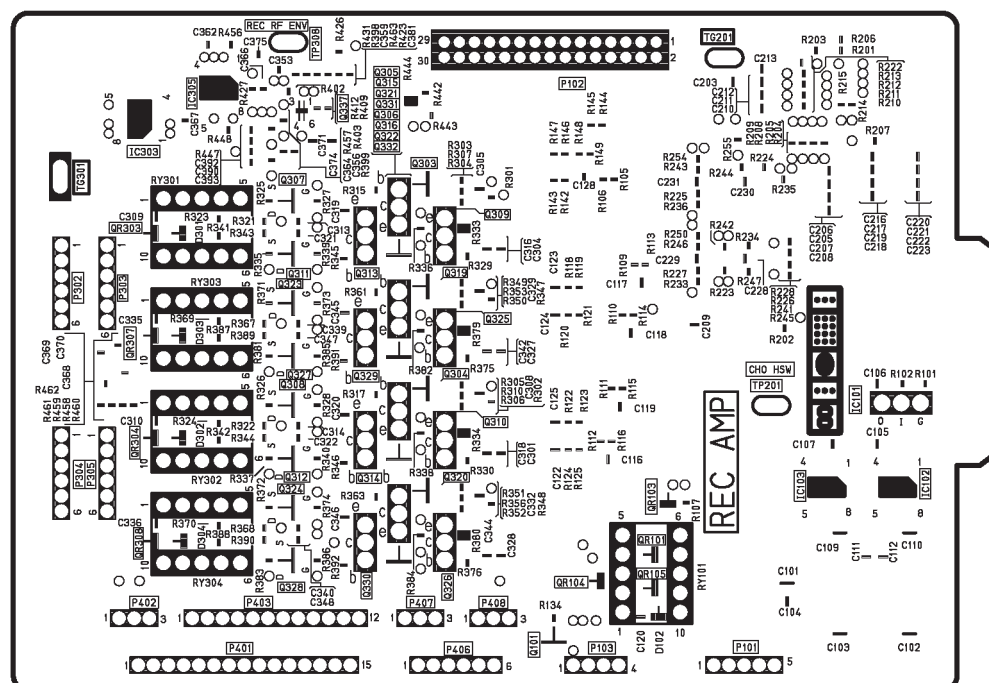


(FOIL SIDE)

REC AMP P.C. BOARD (VEP85188A)



(COMPONENT SIDE)

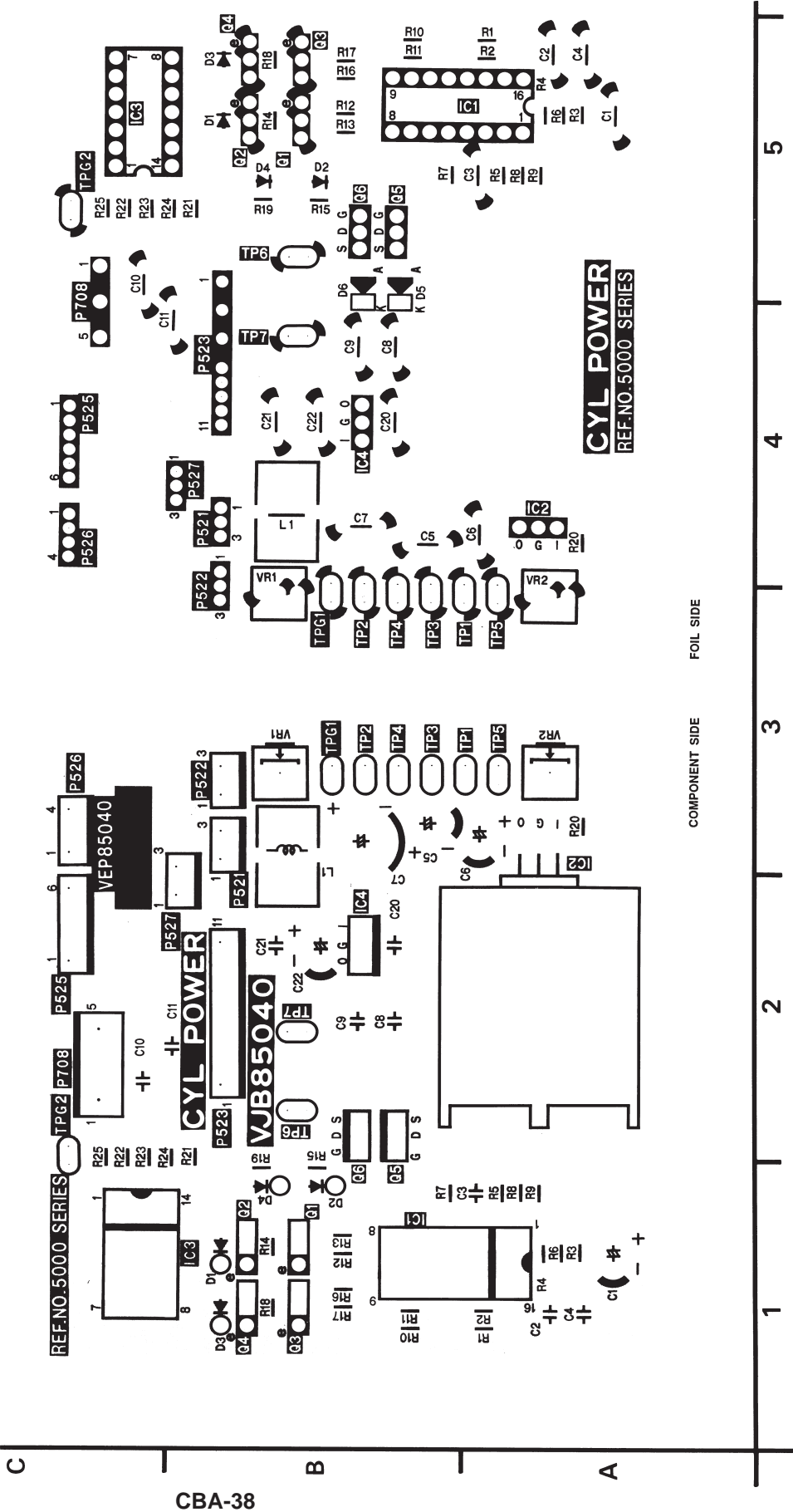


(FOIL SIDE)

CYL POWER P.C. BOARD (VEP85040B)

CYL POWER P.C. BOARD (COMPONENT SIDE)					
REF	LOC	REF	LOC	REF	LOC
Q5001	B-1	TP5001	A-3	VR5002	A-3
Q5002	B-1	TP5002	B-3	P5521	B-3
Q5003	B-1	TP5003	B-3	P5522	B-3
Q5004	B-1	TP5004	B-3	P5523	B-2
Q5005	B-2	TP5005	A-3	P5525	C-2
Q5006	B-2	TP5006	B-2	P5526	C-3
IC5001	B-1	TP5007	B-2	P5527	C-2
IC5002	A-2	TPG5001	B-3	P5708	C-2
IC5003	C-5	TPG5002	C-2		
IC5004	B-2	VR5001	B-3		

CYL POWER P.C. BOARD (FOIL SIDE)					
REF	LOC	REF	LOC	REF	LOC
Q5001	B-5	TP5001	A-3	VR5002	B-4
Q5002	B-5	TP5002	B-3	P5521	B-4
Q5003	B-5	TP5003	B-3	P5522	B-4
Q5004	B-5	TP5004	B-3	P5523	B-4
Q5005	B-5	TP5005	A-3	P5525	C-4
Q5006	B-5	TP5006	B-5	P5526	C-4
IC5001	B-5	TP5007	B-4	P5527	B-4
IC5002	A-4	TPG5001	B-3	P5708	C-5
IC5003	C-5	TPG5002	C-5		
IC5004	B-4	VR5001	B-4		



AT DRIVE P.C. BOARD (VEP82095A)

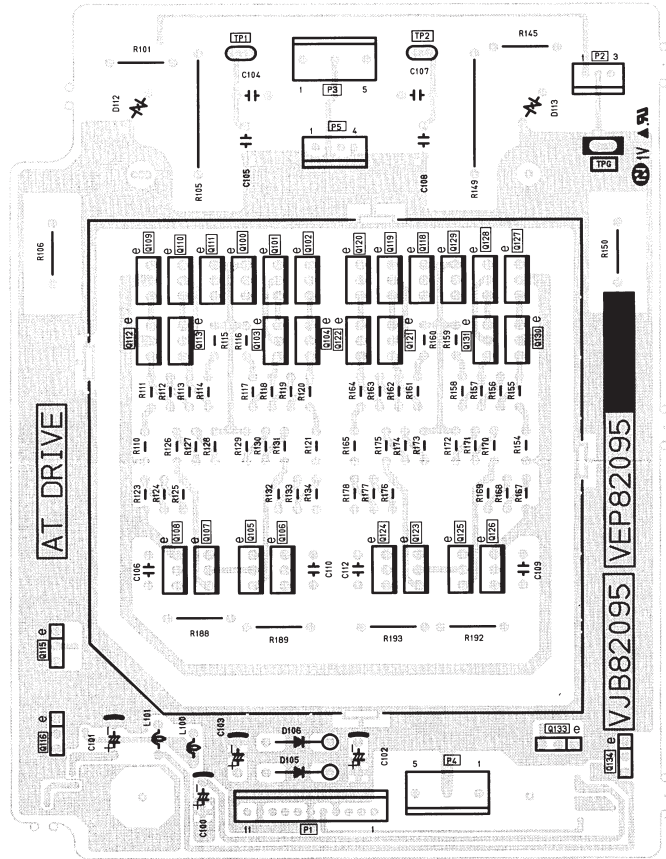
AT DRIVE P.C. BOARD (FOIL SIDE)				
REF	LOC	REF	LOC	LOC
Q100	B-4	Q116	B-6	A-6
Q101	B-4	Q117	B-6	A-6
Q102	B-4	Q118	A-4	A-6
Q103	B-4	Q119	A-4	A-6
Q104	B-4	Q120	A-4	B-3
Q105	B-5	Q121	A-4	A-3
Q106	B-5	Q122	B-4	A-4
Q107	B-5	Q123	B-5	B-6
Q108	B-5	Q124	B-5	A-4
Q109	B-4	Q125	B-5	B-4
Q110	B-4	Q126	B-5	A-6
Q111	B-4	Q127	A-4	B-4
Q112	B-4	Q128	A-4	
Q114	B-6	Q130	A-4	
Q115	B-5	Q131	A-6	

AT DRIVE P.C. BOARD (COMPONENT SIDE)				
REF	LOC	REF	LOC	LOC
Q100	B-2	Q115	B-1	A-2
Q101	B-2	Q116	B-1	A-4
Q102	B-2	Q118	A-2	A-1
Q103	B-2	Q119	A-2	A-1
Q104	B-2	Q120	A-2	B-3
Q105	B-2	Q121	A-2	A-3
Q106	B-2	Q122	B-2	A-3
Q107	B-2	Q123	B-2	B-1
Q108	B-2	Q124	B-2	A-3
Q109	B-2	Q125	B-2	B-3
Q110	B-2	Q126	B-2	A-1
Q111	B-2	Q127	A-2	B-3
Q112	B-2	Q128	A-2	
Q113	B-2	Q129	A-2	

CBA-39

B

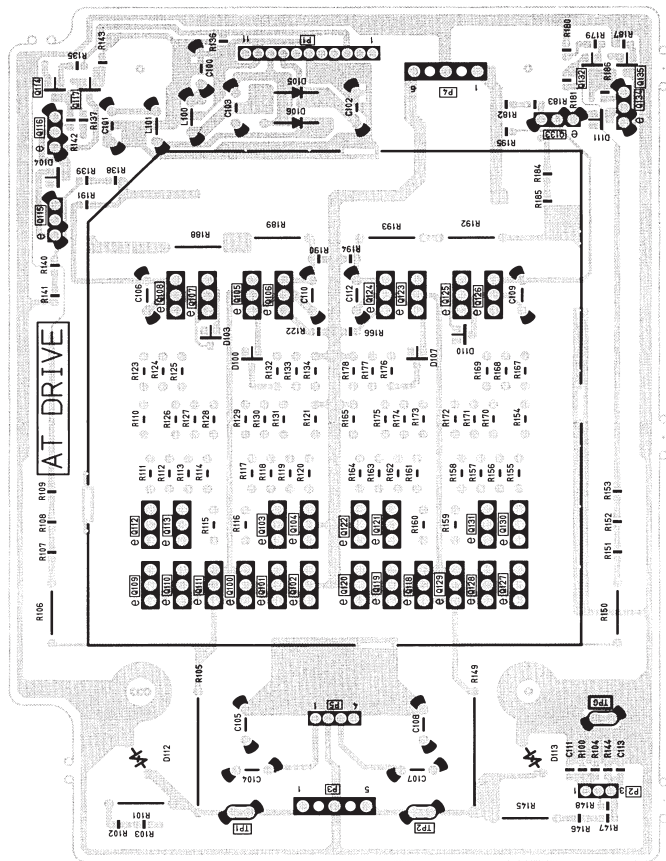
A



(COMPONENT SIDE)

3

2

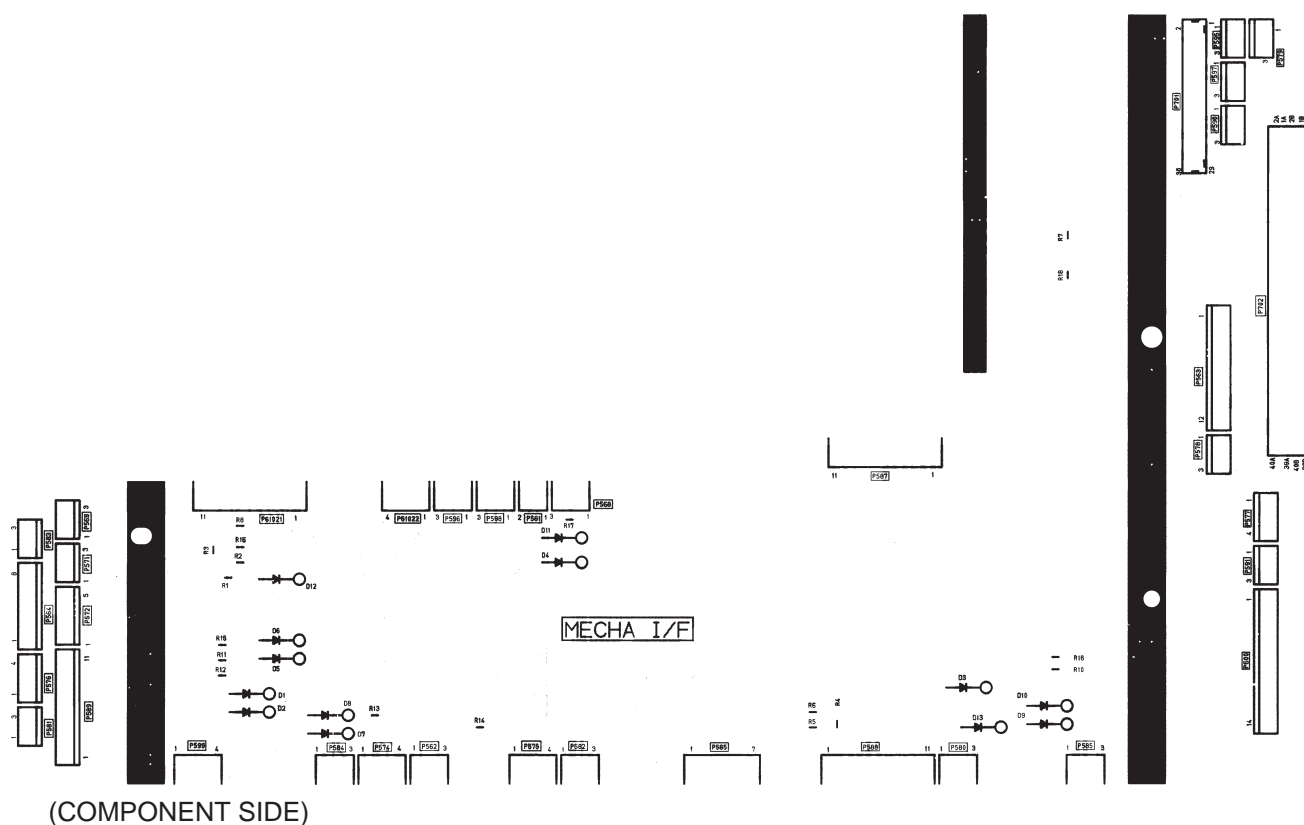


(FOIL SIDE)

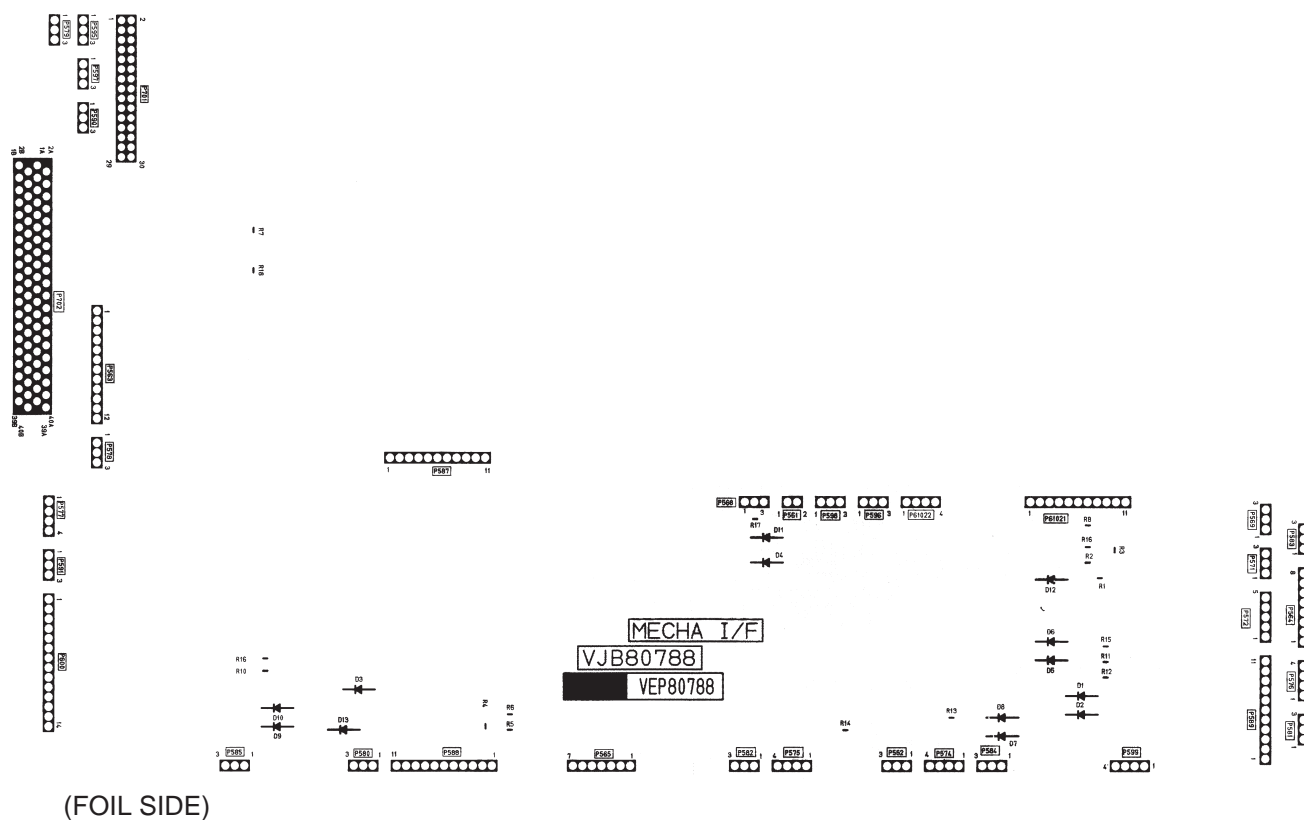
4

5

MECH IF P.C. BAORD (VEP80788A)

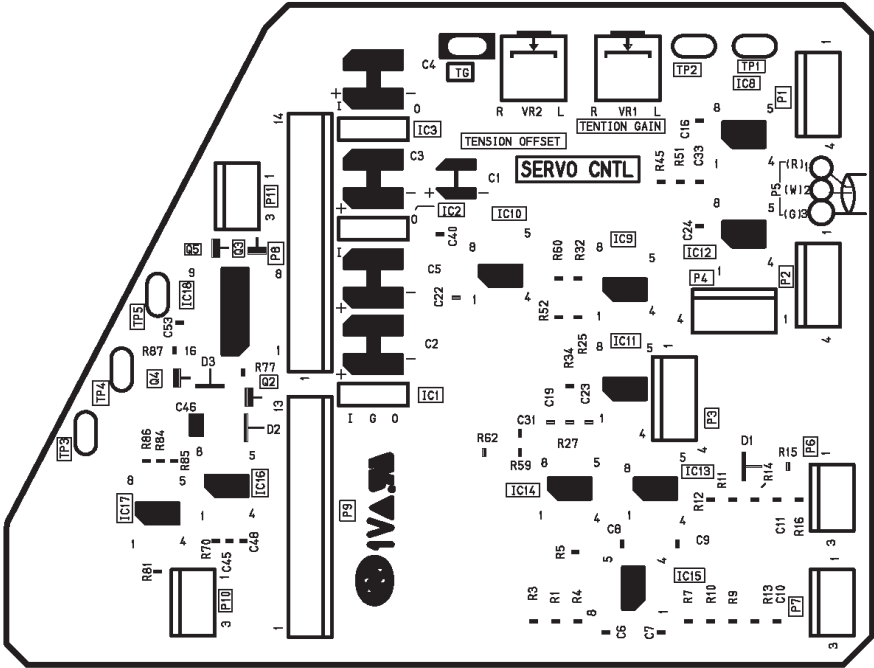


(COMPONENT SIDE)

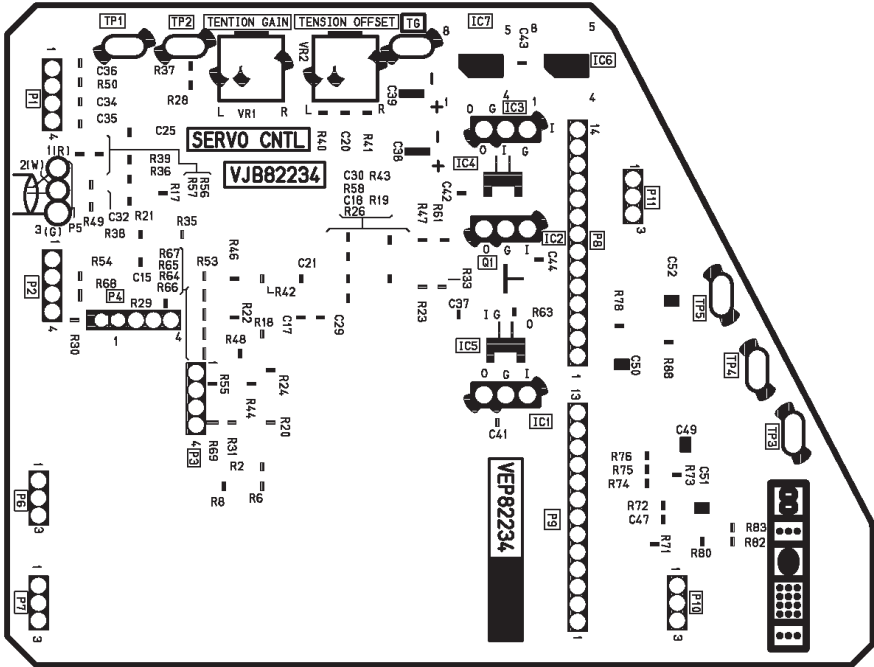


(FOIL SIDE)

SERVO CNTL P.C. BOARD (VEP82234A)



(COMPONENT SIDE)



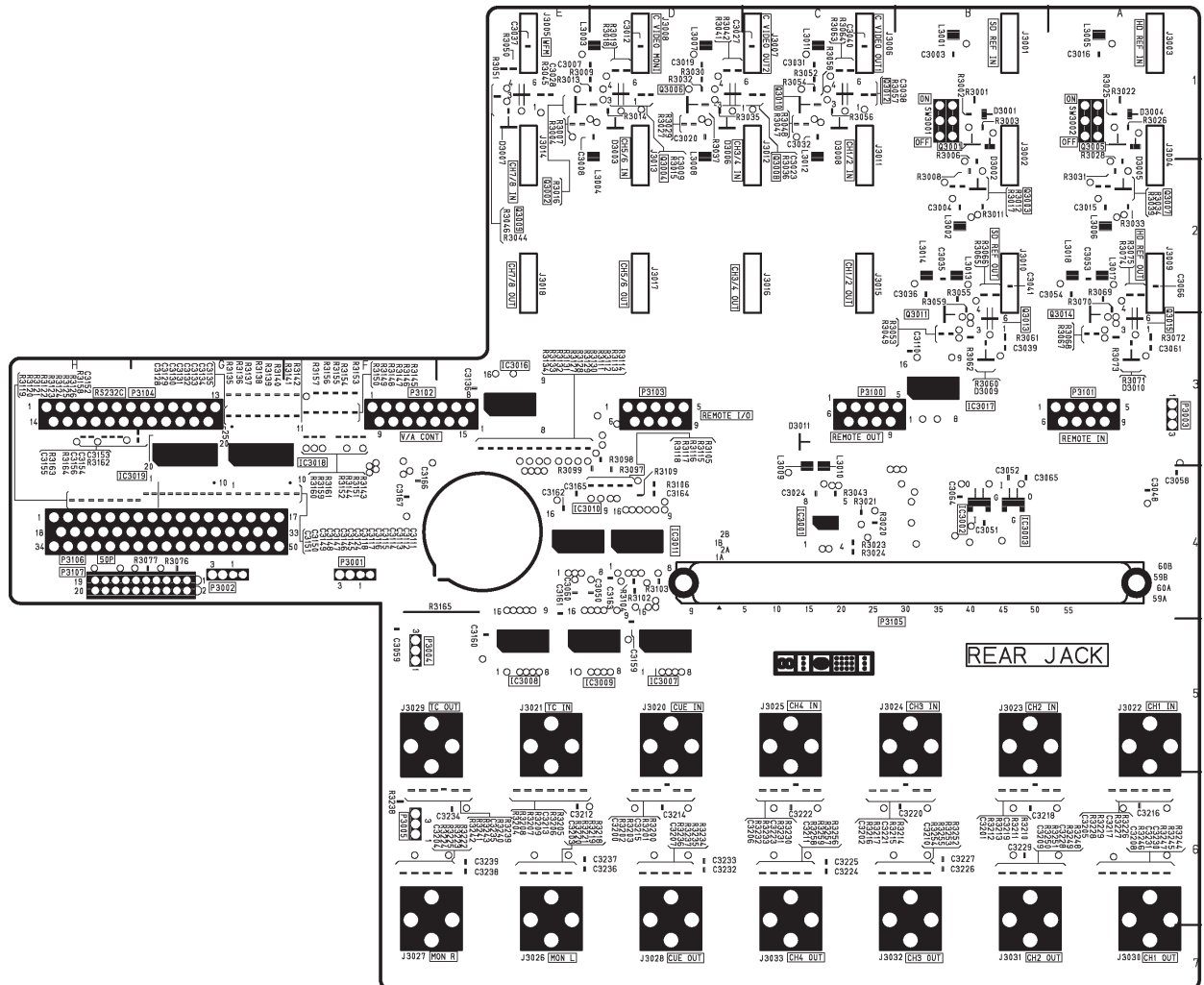
(FOIL SIDE)

(VEP83512B:AJ-HD3700HP/VEP83512C:AJ-HD3700HE)

(COMPONENT SIDE)

REAR JACK P.C. BOARD (VEP83512BAJ-HD3700HP/VEP83512C:AJ-HD3700HE)

REAR JACK P.C. BOARD (FOIL SIDE)					
REF	LOC	REF	LOC	REF	LOC
IC3001	C4	IC3018	G3	Q3008	D1
IC3002	B4	IC3019	G3	Q3009	E1
IC3003	B4	P3105	B4	Q3010	C1
IC3007	D5	Q3001	B1	Q3011	B3
IC3008	E5	Q3002	E1	Q3012	C1
IC3009	D5	Q3003	B2	Q3013	B3
IC3010	E4	Q3004	D1	Q3014	A3
IC3011	D4	Q3005	A1	Q3015	A3
IC3016	E3	Q3006	D1		
IC3017	B3	Q3007	A2		




(FOIL SIDE)

POWER1 P.C. BOARD

(VEP81211A:AJ-HD3700HP/VEP81211B:AJ-HD3700HE)

JAPAN ONLY




警告

AC100V の加わっている活電部 (充電部、活電部) に直接触れないでください。


感電注意 + 感電ややけどの可能性
があります。

- ①



警告


△印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。
- ②

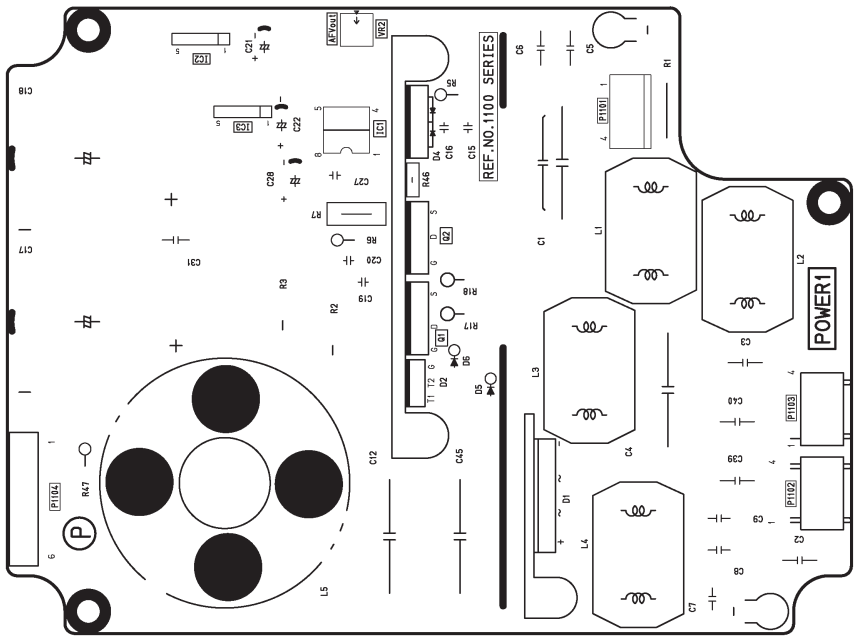


内は充電部です。AC100V が加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。
- ③ 部品交換時には、電源プラグをぬいてから行ってください。
- ④ 一次側 (充電部) の電圧・波形は、一次側アースを基準に測定してください。
- ⑤ 部品品番は、部品価格表で確認の上交換ください。

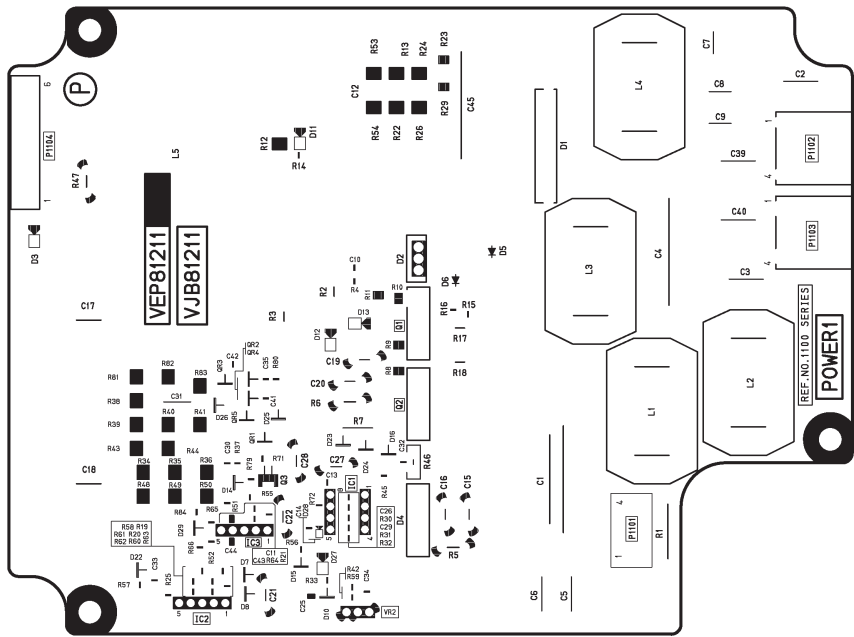
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK △ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CAUTION

THE  MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.




(COMPONENT SIDE)





(FOIL SIDE)

POWER2 P.C. BOARD (VEP81212A)


JAPAN ONLY

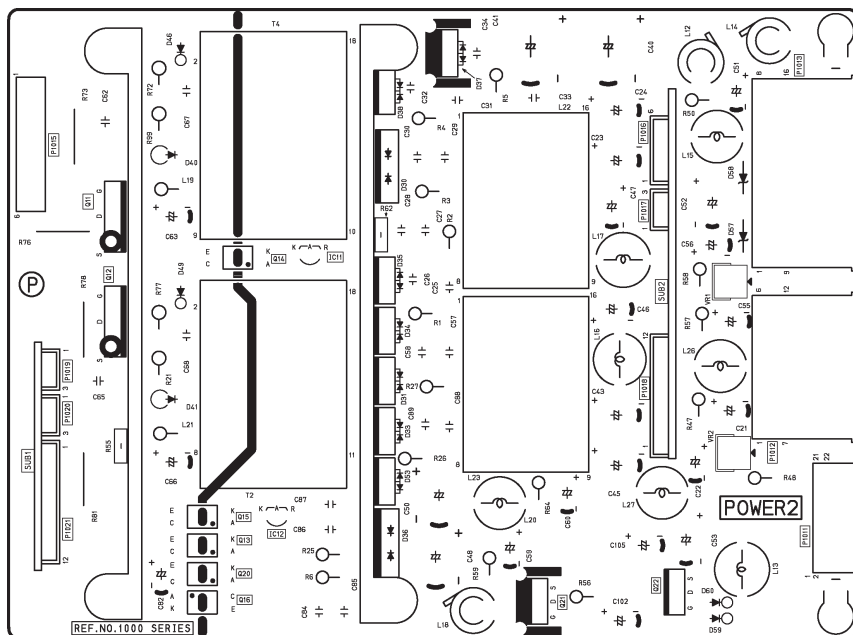
警告	
	AC100Vの加わっている活電部（充電部、活電部）に直接触れないでください。
感電注意	+ 感電ややけどの可能性 があります。

① 警告	① 印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。
② 	② 内は充電部です。AC 100V が加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。
③	③ 部品交換時には、電源プラグをぬいてから行ってください。
④	④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。
⑤	⑤ 部品品番は、部品価格表で確認の上交換ください。

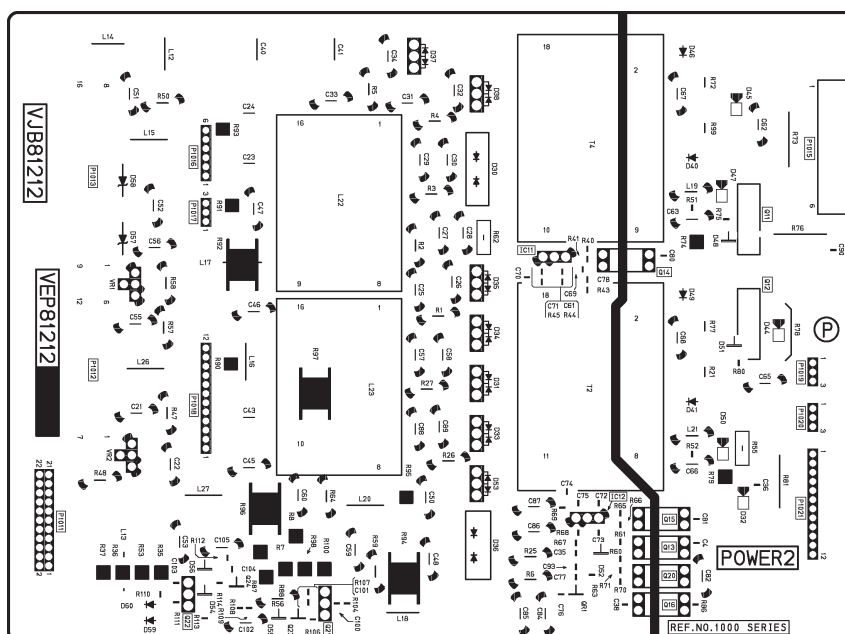
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CAUTION

THE  MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

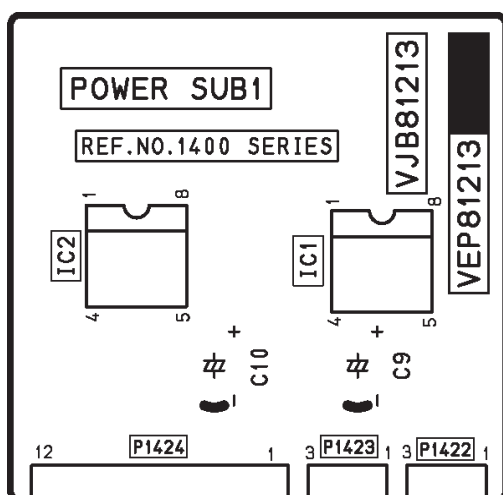


(COMPONENT SIDE)

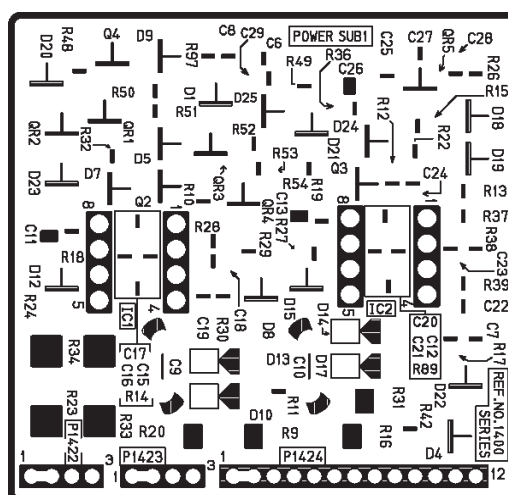


(FOIL SIDE)

POWER SUB1 P.C. BOARD (VEP81213A)

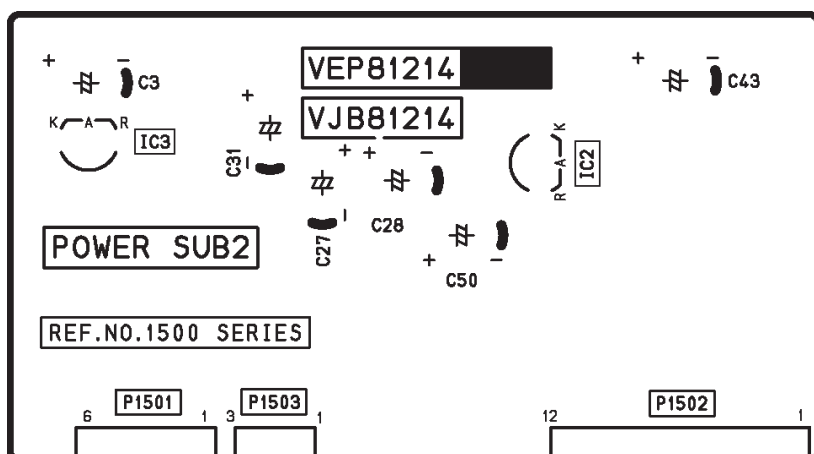


(COMPONENT SIDE)

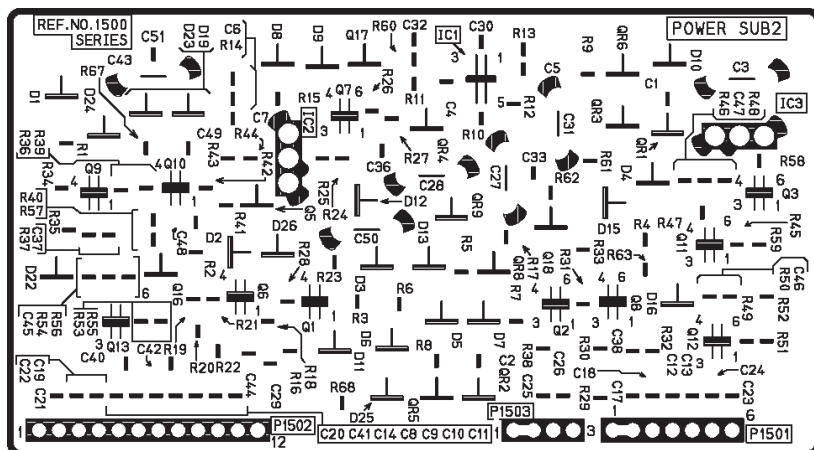


(FOIL SIDE)

POWER SUB2 P.C. BOARD (VEP81214A)



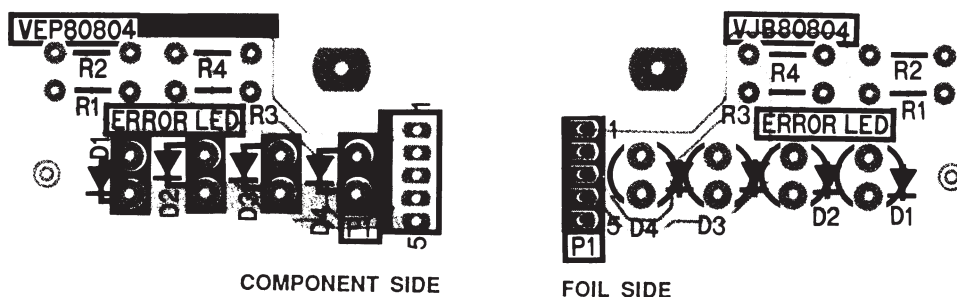
(COMPONENT SIDE)



(FOIL SIDE)

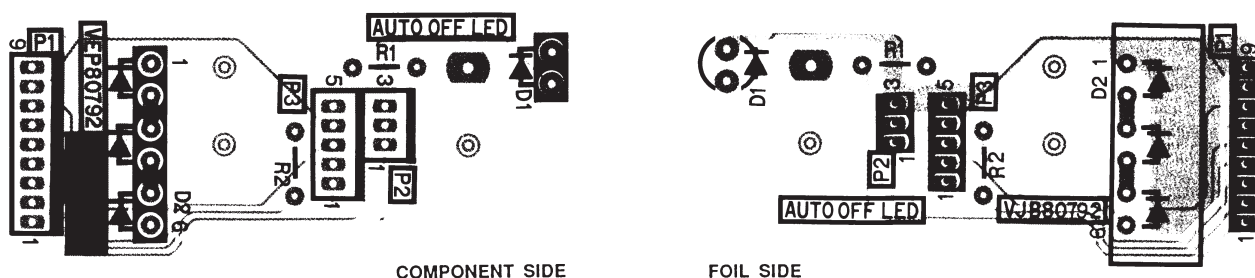
ERROR LED P.C.BOARD (VEP80804A)

ERROR LED P.C. BOARD (VEP80804A)



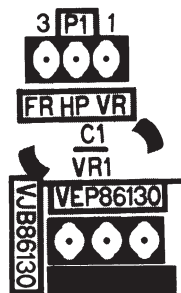
AUTO OFF LED P.C.BOARD (VEP80792A)

AUTO OFF LED P.C. BOARD (VEP80792A)

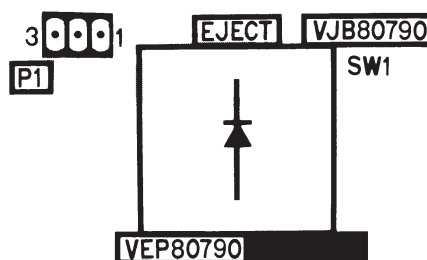


HP VR P.C.BOARD (VEP86130A) EJECT P.C. BOARD (VEP80790A)

HP VR P.C. BOARD (VEP86130A)

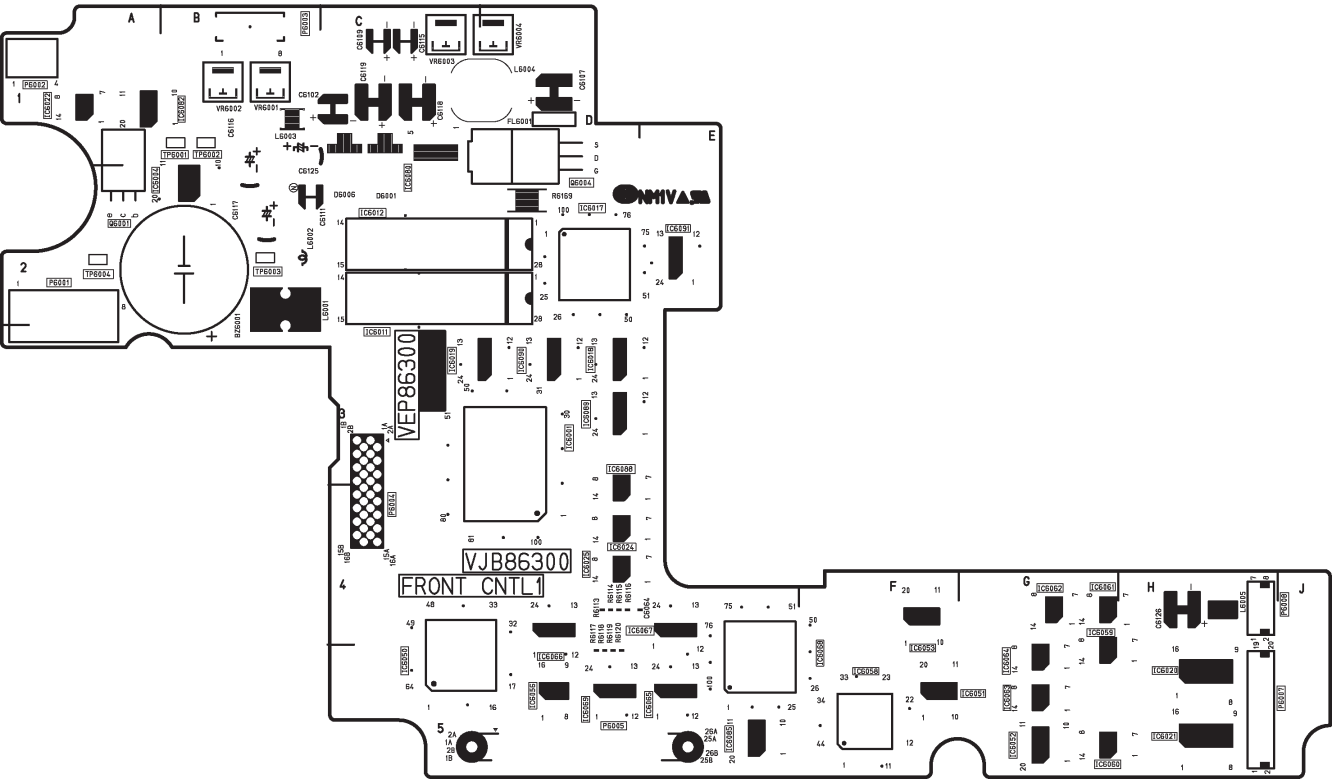


EJECT P.C. BOARD (VEP80790A)



FRONT CNTL1 P.C. BOARD (VEP86300A)

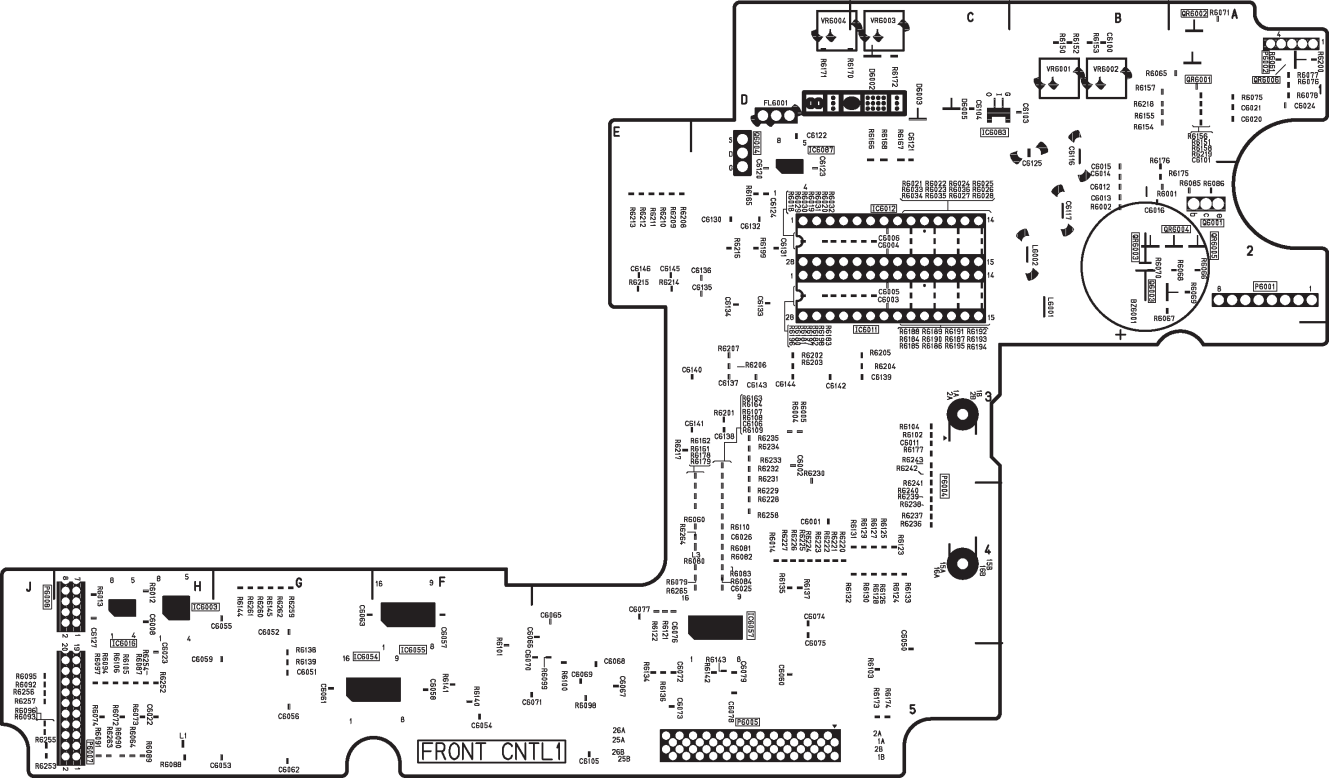
FRONT CNTL1 P.C. BOARD (COMPONENT SIDE)									
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC6001	D-3	IC6024	D-4	IC6061	G-4	IC6082	B-1	TP6003	B-2
IC6004	B-2	IC6025	D-4	IC6062	G-4	IC6085	E-5	TP6004	A-2
IC6011	B-2	IC6050	C-5	IC6063	G-5	IC6088	D-3	VR6001	B-1
IC6012	C-2	IC6051	F-5	IC6064	G-5	IC6089	D-3	VR6002	B-1
IC6017	C-1	IC6052	G-5	IC6065	E-5	IC6090	D-3	VR6003	C-1
IC6018	E-2	IC6053	F-4	IC6066	D-5	IC6091	D-2	VR6004	D-1
IC6019	C-3	IC6056	D-5	IC6067	E-4	Q6001	A-2		
IC6020	H-5	IC6058	F-5	IC6068	E-5	Q6004	D-1		
IC6021	H-5	IC6059	G-5	IC6069	D-5	TP6001	B-1		
IC6022	A-1	IC6060	G-5	IC6080	C-2	TP6002	B-1		



(COMPONENT SIDE)

FRONT CNTL1 P.C. BOARD (VEP86300A)

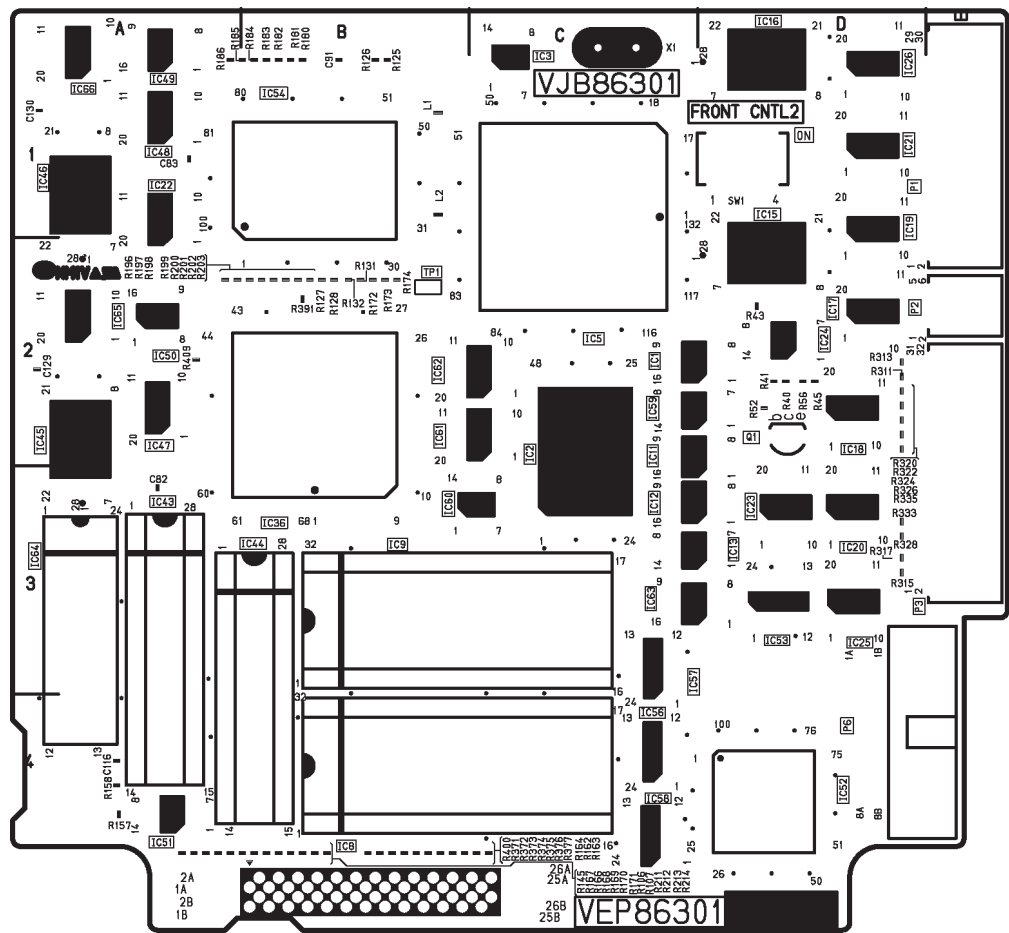
FRONT CNTL1 P.C. BOARD (FOIL SIDE)					
REF	LOC	REF	LOC	REF	LOC
IC6003	H-5	Q6003	B-2		
IC6011	C-2	Q6004	D-1		
IC6012	C-2	QR6001	A-1		
IC6016	H-5	QR6002	A-1		
IC6054	F-5	QR6005	A-2		
IC6055	F-4	QR6006	A-1		
IC6057	D-4	VR6001	B-1		
IC6083	C-1	VR6002	B-1		
IC6087	D-2	VR6003	C-1		
Q6001	A-2	VR6004	D-1		



(FOIL SIDE)

FRONT CNTL2 P.C. BOARD (VEP86301A)

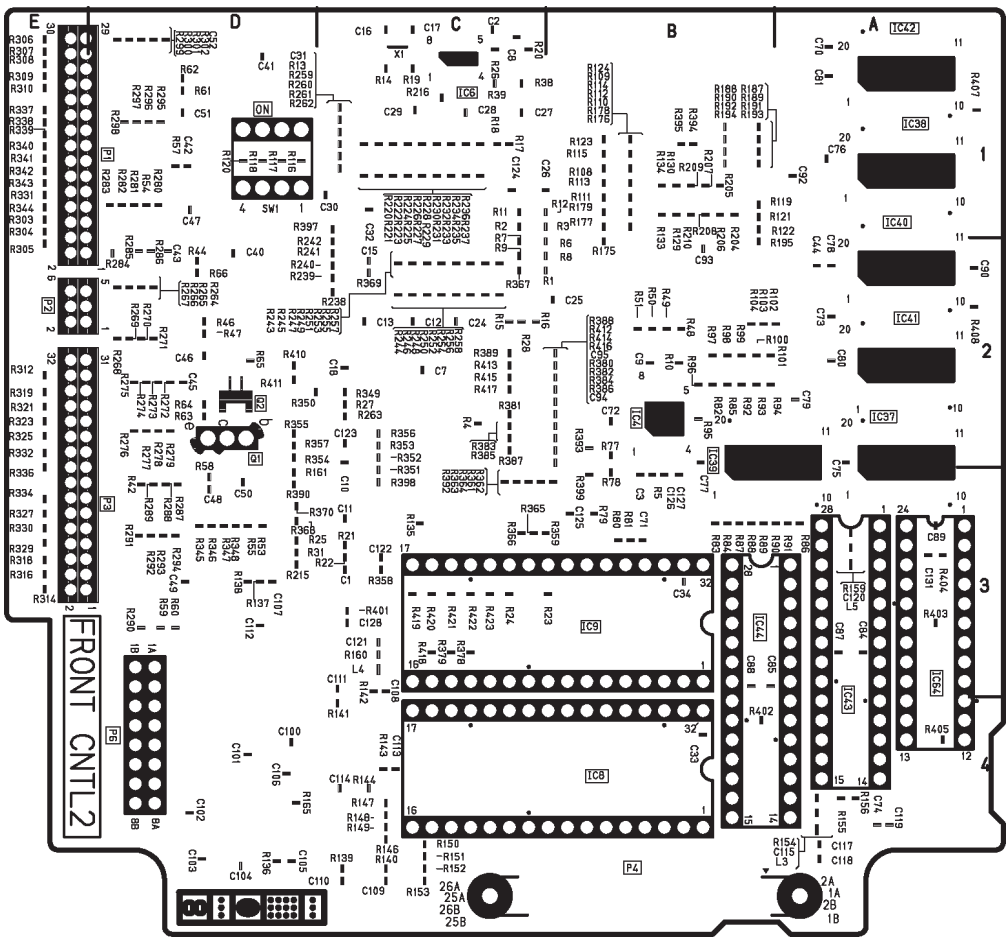
FRONT CNTL2 P.C. BOARD (COMPONENT SIDE)							
REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC1	C-2	IC19	D-1	IC47	A-2	IC61	C-2
IC2	C-2	IC20	D-3	IC48	A-1	IC62	C-2
IC3	C-1	IC21	D-1	IC49	A-1	IC63	C-3
IC5	C-1	IC22	A-1	IC50	A-2	IC64	A-3
IC8	B-4	IC23	D-3	IC51	A-4	IC65	A-2
IC9	B-3	IC24	D-2	IC52	D-4	IC66	A-1
IC11	C-2	IC25	D-3	IC53	D-3	Q1	D-2
IC12	C-3	IC26	D-1	IC54	B-1	TP1	B-2
IC13	C-3	IC36	B-2	IC56	C-4		
IC15	D-2	IC43	A-3	IC57	C-3		
IC16	D-1	IC44	B-3	IC58	C-4		
IC17	D-2	IC45	A-2	IC59	C-2		
IC18	D-2	IC46	A-1	IC60	C-3		



(COMPONENT SIDE)

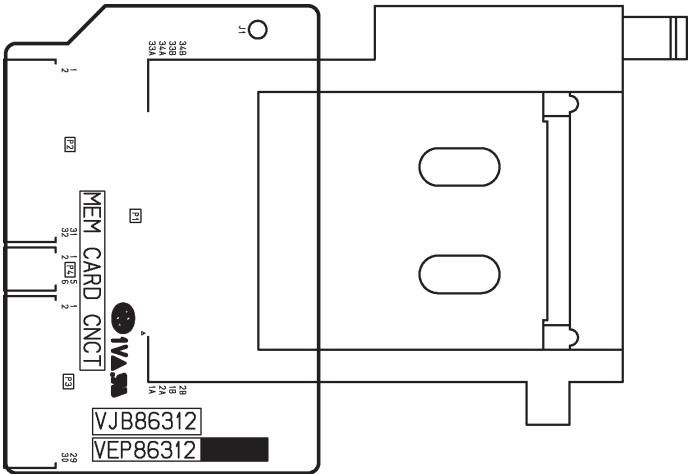
FRONT CNTL2 P.C. BOARD (VEP86301A)

FRONT CNTL2 P.C. BOARD (FOIL SIDE)					
REF	LOC	REF	LOC	REF	LOC
IC4	B-2	IC41	A-2	IC9	B-3
IC6	C-1	IC42	A-1	Q1	D-2
IC37	A-2	IC43	A-3	Q2	D-2
IC38	A-1	IC44	B-3		
IC39	A-2	IC64	A-3		
IC40	A-2	IC8	B-4		

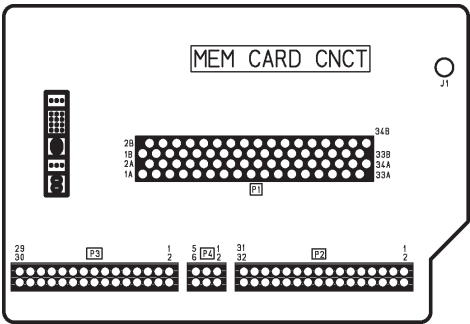


(FOIL SIDE)

MEM CARD P.C. BOARD (VEP86312A)

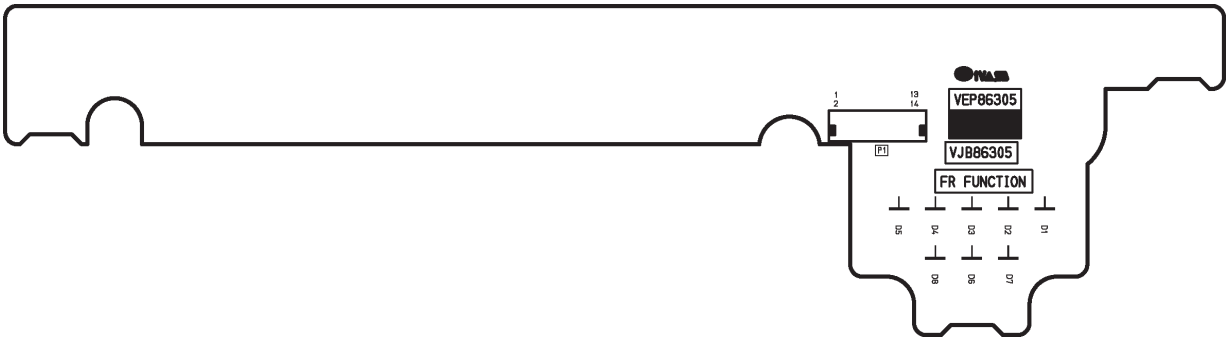


(COMPONENT SIDE)

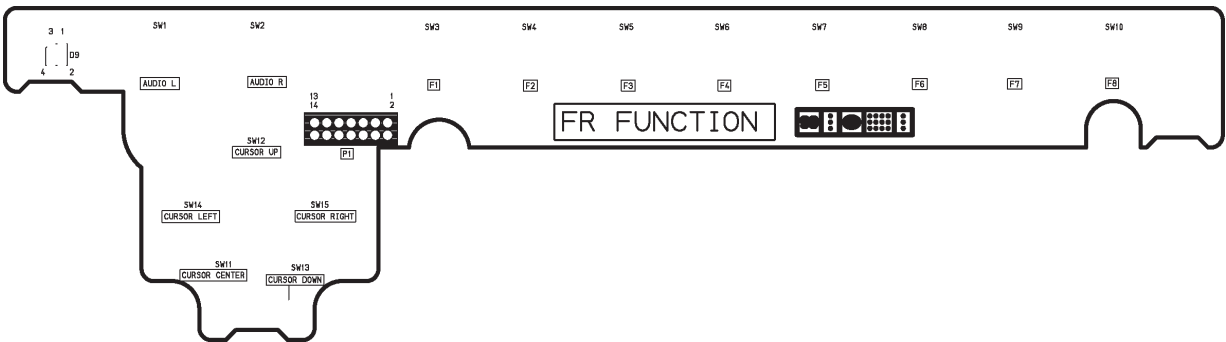


(FOIL SIDE)

FR FUNCTION P.C. BOARD (VEP86305A)

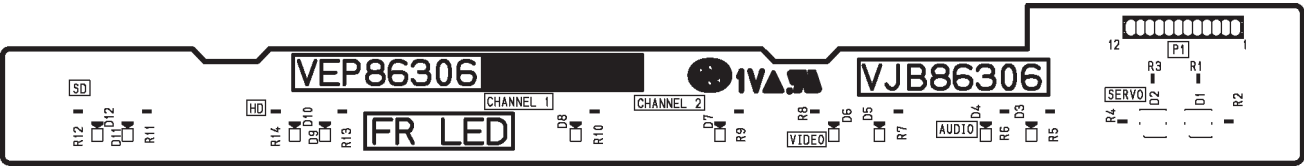


(COMPONENT SIDE)



(FOIL SIDE)

FR LED PC. BAORD (VEP86306A)

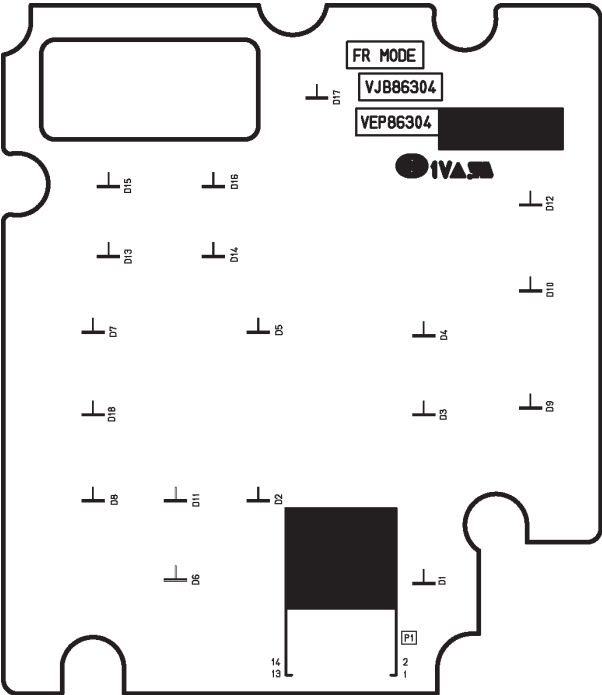


(COMPONENT SIDE)

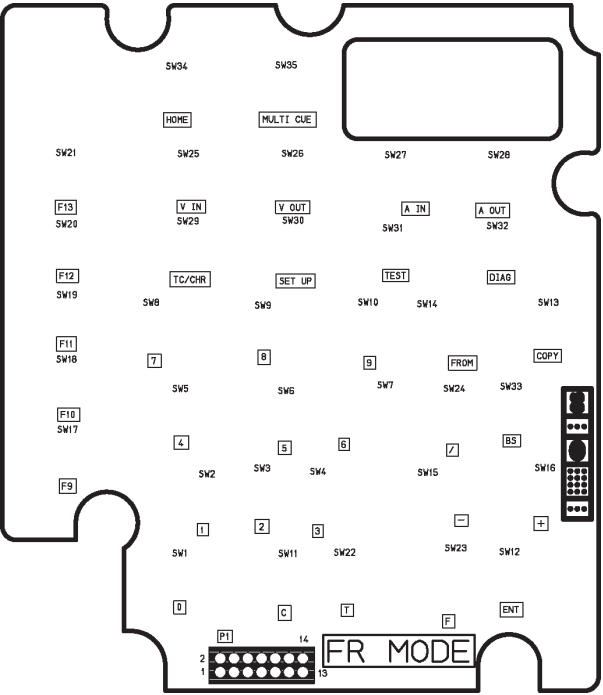


(FOIL SIDE)

FR MODE P.C. BOARD (VEP86304A)

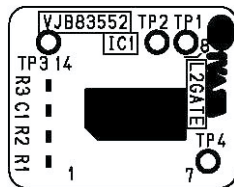


(COMPONENT SIDE)

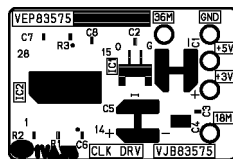


(FOIL SIDE)

L2: L2 GATE P.C. BOARD (VEP83552A)

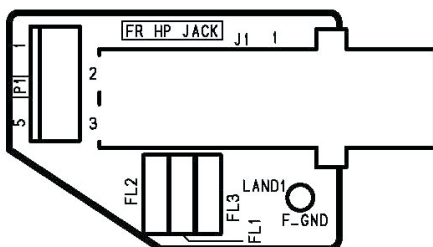


CLK_DRV P.C. BOARD (VEP83575A)

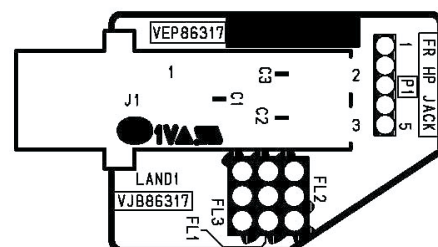


(COMPONENT SIDE)

FR HP JACK P.C. BOARD (VEP86317A)



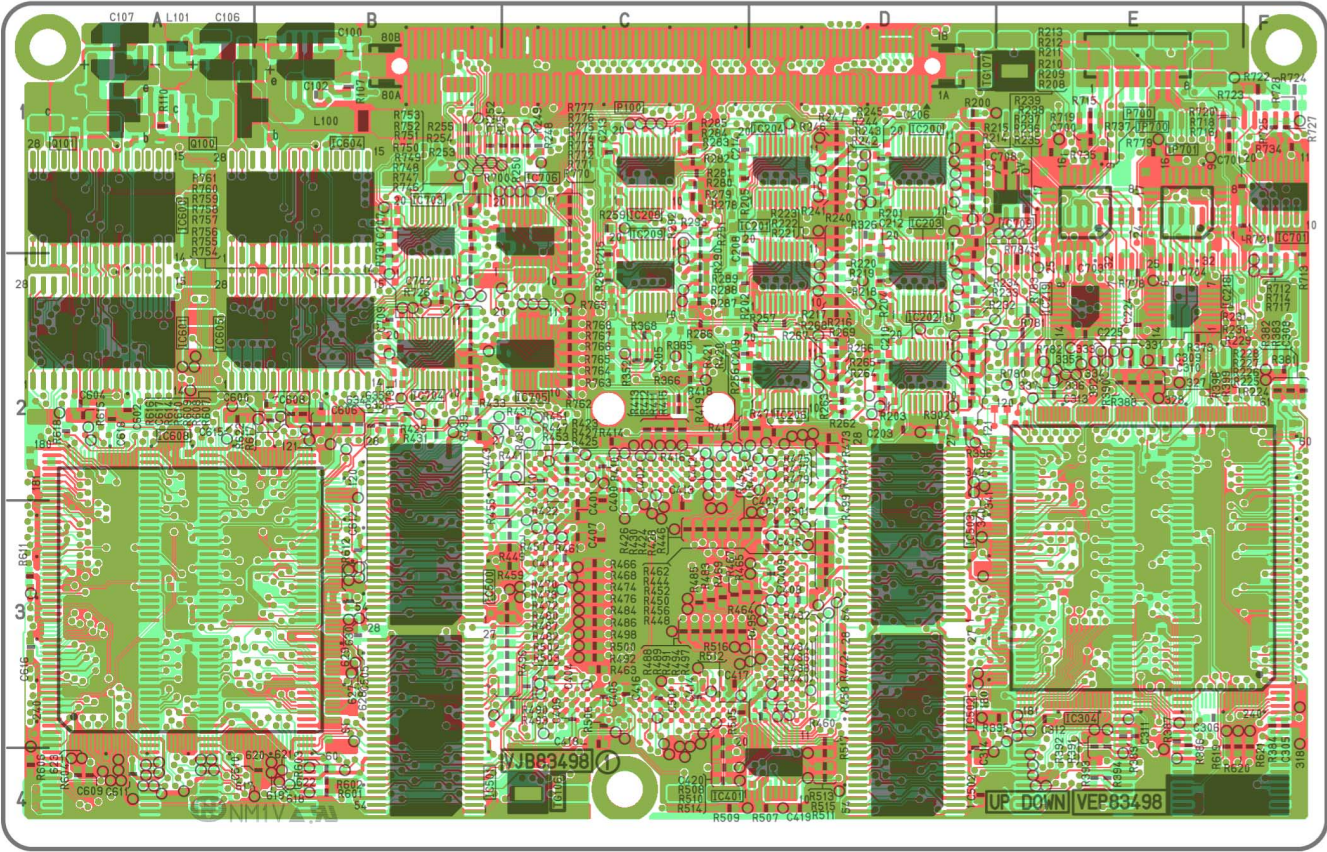
(COMPONENT SIDE)



(FOIL SIDE)

UP DOWN P.C. BOARD (VEP83498C:AJ-UDC3700P option)

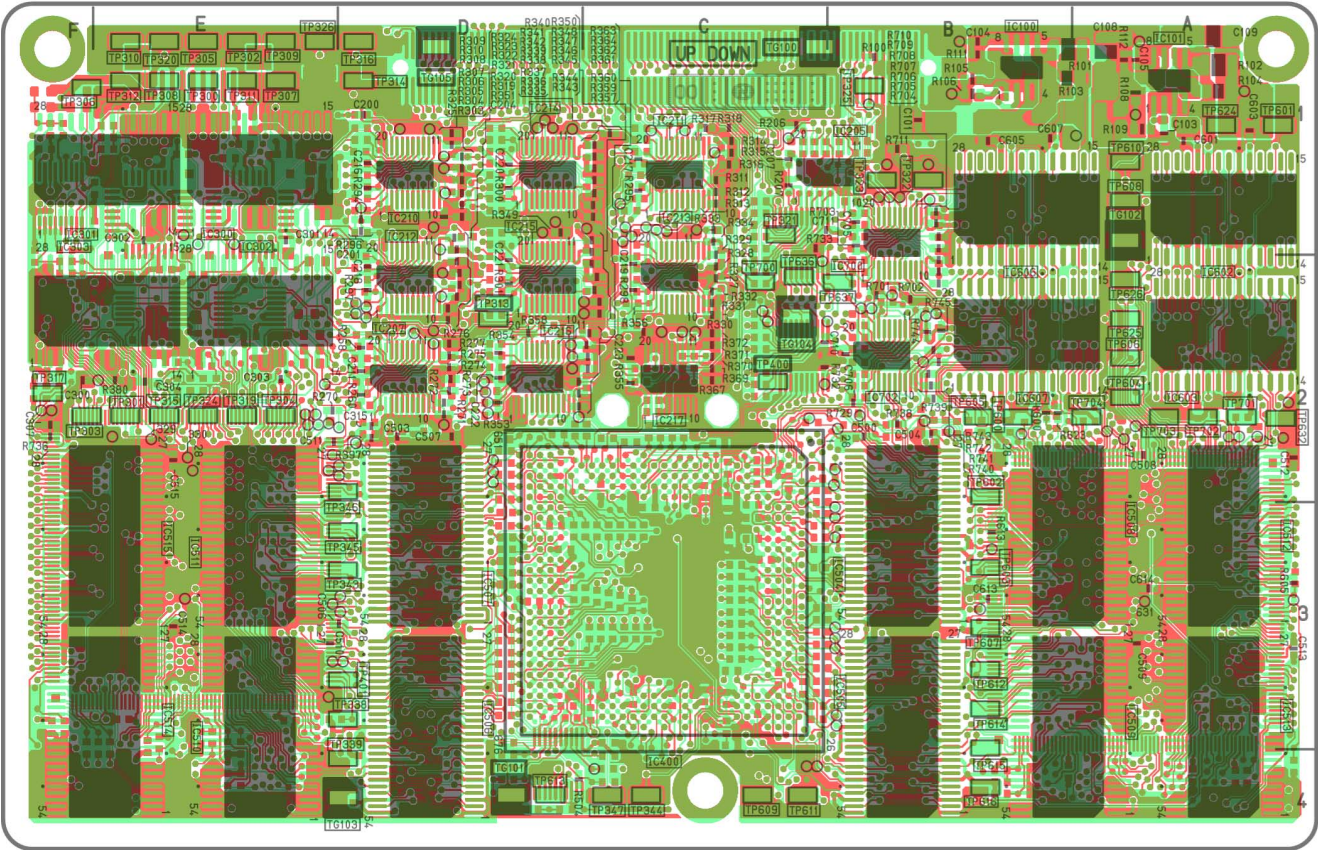
REF	LOC	REF	LOC
IC200	D-1	IC604	B-1
IC201	C-2	IC605	A-2
IC202	D-2	IC608	A-2
IC203	D-2	IC701	F-1
IC204	D-1	IC703	B-1
IC206	D-2	IC704	B-2
IC208	C-1	IC705	C-2
IC209	C-2	IC706	C-1
IC218	E-2	IC709	E-1
IC219	E-2	IP700	E-1
IC304	E-3	IP701	E-1
IC401	D-4	P100	C-1
IC500	B-3	P700	E-1
IC501	B-4	Q100	A-1
IC502	D-3	Q101	A-1
IC503	D-3	TG106	C-4
IC600	A-1	TG107	E-1
IC601	A-2		



(COMPONENT SIDE)

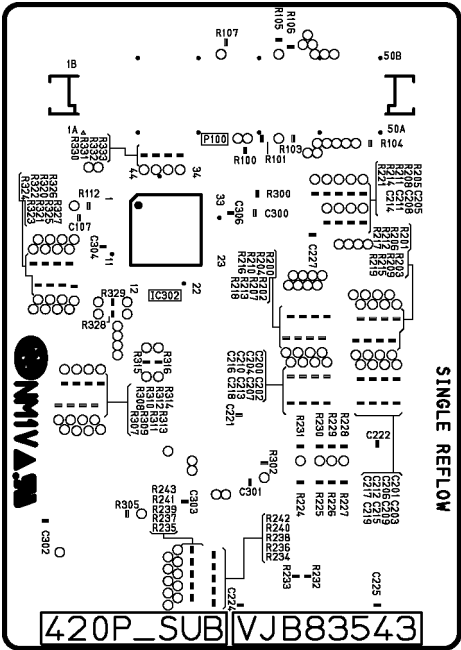
UP DOWN P.C. BOARD (VEP83498C:AJ-UDC3700P option)

REF	LOC	REF	LOC	REF	LOC
IC100	B-1	TG100	C-1	TP344	C-4
IC101	A-1	TG101	D-4	TP345	D-3
IC205	B-1	TG102	A-1	TP346	D-2
IC207	D-2	TG103	D-4	TP347	C-4
IC210	D-1	TG104	C-2	TP400	C-2
IC211	C-1	TG105	D-1	TP401	D-3
IC212	D-2	TP300	E-1	TP600	B-2
IC213	C-2	TP301	E-2	TP601	A-1
IC214	D-1	TP302	E-1	TP602	B-2
IC215	D-1	TP303	F-2	TP603	B-3
IC216	D-2	TP304	E-2	TP604	A-2
IC217	C-2	TP305	E-1	TP605	B-2
IC300	E-1	TP306	F-1	TP606	A-2
IC301	F-1	TP307	E-1	TP607	B-3
IC302	E-2	TP308	E-1	TP608	A-1
IC303	E-2	TP309	E-1	TP609	C-3
IC400	C-3	TP310	E-1	TP610	A-1
IC504	B-3	TP311	E-1	TP611	C-3
IC505	B-3	TP312	E-1	TP612	B-3
IC506	D-3	TP313	D-2	TP613	D-4
IC507	D-3	TP314	D-1	TP614	B-3
IC508	A-3	TP315	E-2	TP615	B-4
IC509	A-3	TP316	D-1	TP616	B-4
IC510	E-3	TP317	F-2	TP624	A-1
IC511	E-3	TP319	E-2	TP625	A-2
IC512	A-3	TP320	E-1	TP626	A-2
IC513	A-3	TP321	C-1	TP632	A-2
IC514	E-3	TP322	B-1	TP636	C-2
IC515	E-3	TP323	B-1	TP637	B-2
IC602	A-1	TP324	E-2	TP700	C-2
IC603	A-2	TP325	B-1	TP701	A-2
IC606	B-1	TP326	E-1	TP702	A-2
IC607	B-2	TP338	D-3	TP703	A-2
IC700	B-1	TP339	D-3	TP704	A-2
IC702	B-2	TP343	D-3		



(FOIL SIDE)

420P SUB P.C. BOARD (VEP83543A:AJ-UDC3700P option)



SECTION 8

EXPLODED VIEWS & REPLACEMENT PARTS LIST

Note:

1. *Be sure to make your orders of replacement parts according to this list.
2. Unless otherwise specified, all resistors are in OHMS, K=1,000 OHMS, all capacitors are in MICROFARADS (μ F), P= μ F.
3. The P.C. Board untils marked with "■" shown below the main assembled parts.
4. The parts marked with (E) on the exploded view show the electric parts.
5. IMPORTANT SAFETY NOTICE
Components identified with the mark Δ have the special characteristics for safety. When replacing any of these components, use only the same type.
6. The marking (RTL) indicates the retention time is limited for this item.
After the diacontinuation of this assembly in production, it will no longer be available.

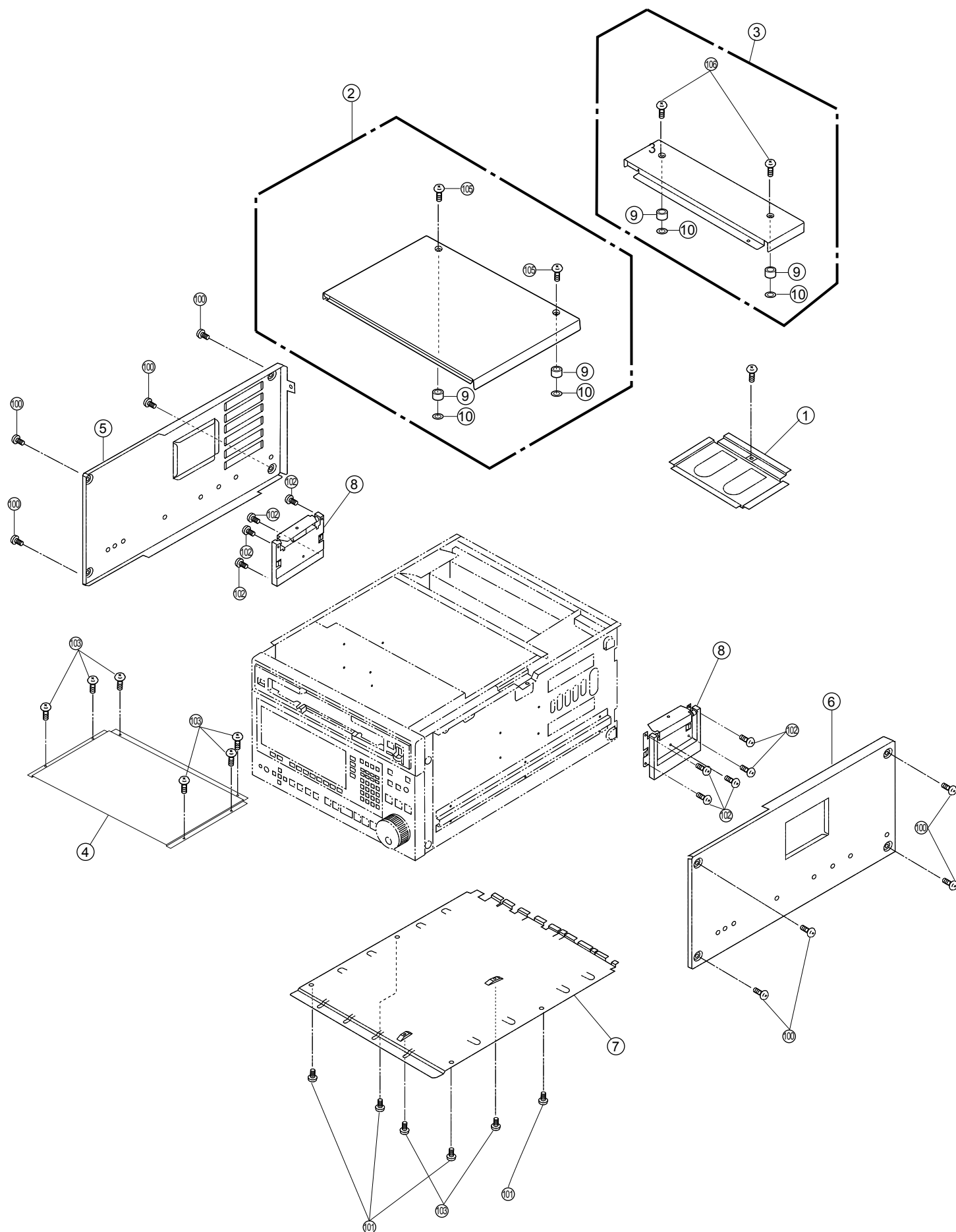
CONTENTS

SERVICING FIXTURES & TOOLS	PRT-1
CASING PARTS ASSEMBLY	PRT-2
FRONT PANEL ASSEMBLY	PRT-4
CHSSIS FRAME ASSEMBLY	PRT-6
REAR JACK PANEL ASSEMBLY	PRT-8
MECHANICAL COMPONENT ASSEMBLY(1)	PRT-10
MECHANICAL COMPONENT ASSEMBLY(2)	PRT-12
MECHANICAL COMPONENT ASSEMBLY(3)	PRT-14
MECHANICAL COMPONENT ASSEMBLY(4)	PRT-16
CASSETTE COMPARTMENT ASSEMBLY	PRT-18
CYLINDER ASSEMBLY	PRT-20
PACKING PARTS ASSEMBLY	PRT-22
ELECTRICAL REPLACEMENT PARTS LIST (AJ-HD3700HP)	PRT-23
ELECTRICAL REPLACEMENT PARTS LIST (AJ-HD3700HE)	PRT-94
PACKING PARTS ASSEMBLY (AJ-UDC3700P)	PRT-165
ELECTRICAL REPLACEMENT PARTS LIST (AJ-UDC3700P)	PRT-166

SERVICING FIXTURES & TOOLS

[illegible][illegible]

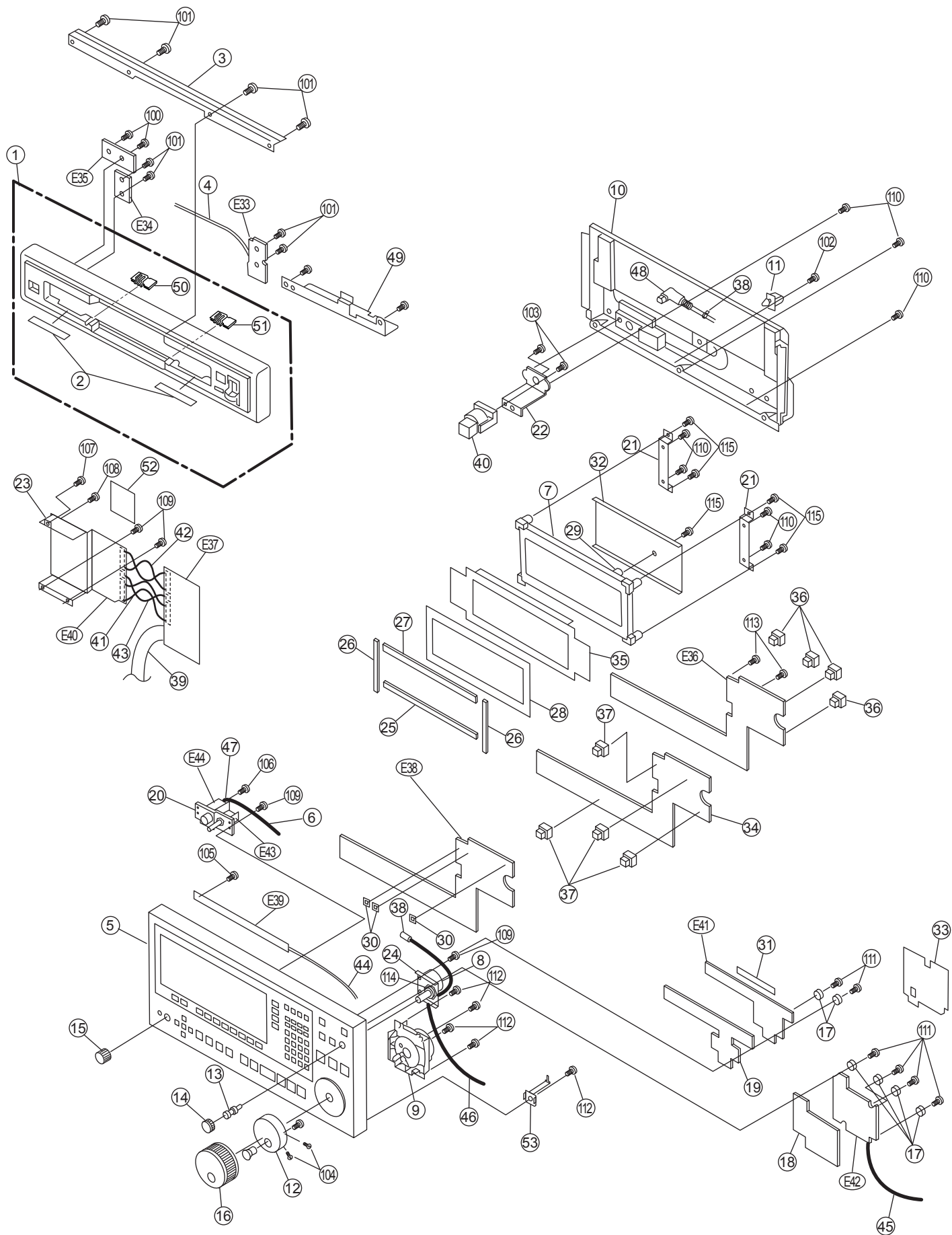
CASING PARTS ASSEMBLY



CASING PARTS ASSEMBLY

[illegible]

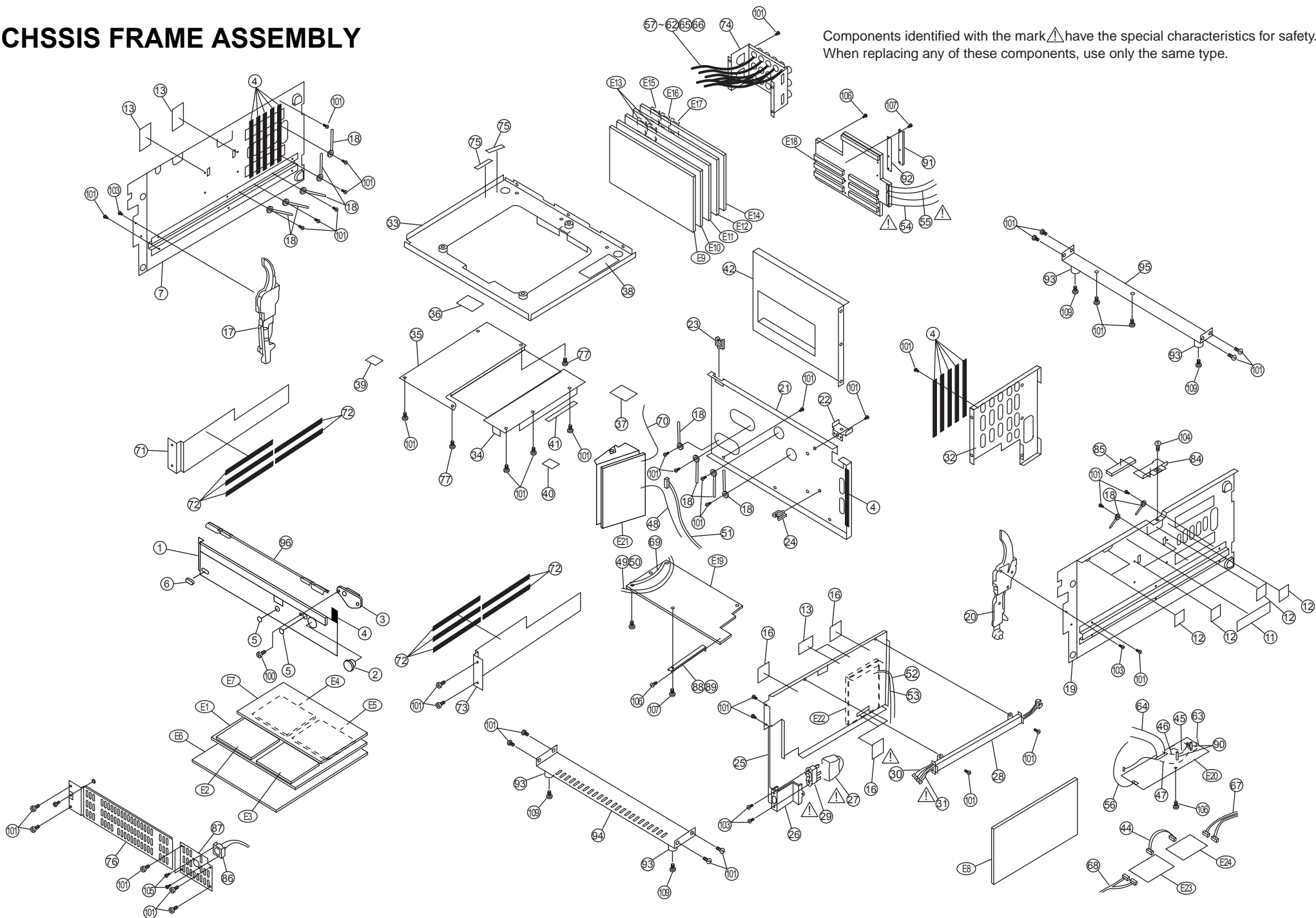
FRONT PANEL ASSEMBLY




FRONT PANEL ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYP7874	FRONT (T) PANEL(1) ASS'Y	1		E33	VEP80792A	AUTO OFF LED P.C.BOARD	1	
2	VMT0582	SMOOTHER	1		E34	VEP80790A	EJECT P.C.BOARD	1	
3	VMP4047	FRONT PANEL ANGLE	1		E35	VEP80804A	ERROR LED P.C.BOARD	1	
4	VEE8378	EJECT CABLE ASS'Y	1		E36	VEP86300A	FRONT CONTROL 1 P.C.BOARD	1	
5	VYP7876	FRONT (B) PANEL(1) ASS'Y	1		E37	VEP86301A	FRONT CONTROL 2 P.C.BOARD	1	
6	VLP0123	FERRITE CORE	1	J0KG00000001	E38	VEP86302A	FRONT SW P.C.BOARD	1	
7	VEQ2173	EL DISPLAY	1		E39	VEP86306A	FRONT LED P.C.BOARD	1	
8	VSQ0775	ROTARY ENCODER	1		E40	VEP86312A	MEM CARD CNCT P.C.BOARD	1	
9	VSR0112	SEARCH DIAL	1		E41	VEP86305A	FRONT FUNCTION P.C.BOARD	1	
10	VYF2780	FRONT COVER ASS'Y	1		E42	VEP86304A	FRONT MODE P.C.BOARD	1	
11	VJF1080	CABLE CLAMP	1		E43	VEP86130B	FR HP VR P.C.BOARD	1	
12	VXU1087	SEARCH DIAL BUSH ASS'Y	1		E44	VEP86317A	FR HP JACK P.C.BOARD	1	
13	VGU5332	ADJUST KNOB	1						
14	VGU5333	ADJUST RUBBER COVER	1						
15	VGU5334	LEVER VR KNOB	1						
16	VGU5780	SEARCH DIAL COVER	1						
17	VGQ3340	SPACER	8						
18	VMG1337	BUTTON (A)	1						
19	VMG1338	BUTTON (B)	1						
20	VMP4053	HP JACK HOLDER ANGLE	1						
21	VMP4205	LCD MOUNT ANGLE	2						
22	VMP4206	I/F MOUNT ANGLE	1						
23	VMP6494	PC CARD HOLDER ANGLE	1						
24	VMP6495	ADJUST VOL HOLDER ANGLE	1						
25	VMT0536	DISPLAY CUSHION	1						
26	VMT0537	DISPLAY CUSHION	2						
27	VMT0538	DISPLAY CUSHION	1						
28	VMT0950	DISPLAY SPACER	1						
29	VMX1195	HEX SCREW	1	K9ZZ00000692					
30	VMX3029	SW COVER	3						
31	VMX3045	P.C.BOARD HOLDER	1						
32	VMZ2872	DISPLAY INSULATION PLATE	1						
33	VMZ3058	INSULATION SHEET A	1						
34	VMZ3059	INSULATION SHEET B	1						
35	VSC4844	DISPLAY SHEET	1						
36	VHN0060	NYLON NUT B	3						
37	VHN0061	NYLON NUT C	6						
38	VJF1157	HARNESS	5						
39	K1PB16B00001	FRONT RIBBON CABLE	1						
40	VEE8647	REMOTE CONTROL CABLE	1						
41	VEE0L77	FRONT CABLE 1	1						
42	VEE0L78	FRONT CABLE 2	1						
43	VEE0L79	FRONT CABLE 3	1						
44	VEE0L80	FRONT CABLE 4	1						
45	VEE0L81	FRONT CABLE 5	2						
46	VEE0L82	FRONT CABLE 6	1						
47	VEE0L84	HP CABLE	1						
48	VEC0975	CORE SHIELD CABLE 20P	1	K1EA20AA0001					
49	VMP6753	FRONT UPPER SPACER	1						
50	VMC1710	PANEL EARTH SPRING (L)	1	FOR AJ-HD3700HE					
51	VMC1711	PANEL EARTH SPRING (R)	1	FOR AJ-HD3700HE					
52	VGf0840	DUST PROOF BARRIER	1	FOR AJ-HD3700HE					
53	VMP6926	EARTH ANGLE	1	FOR AJ-HD3700HE					
100	XTN3+6J	SCREW	8						
101	XTV3+8J	SCREW	8						
102	XTB3+8FFZ	SCREW	2						
103	XSN2+6FZ	SCREW	2						
104	XSN3+6	SCREW	2						
105	XTV26+6JFR	SCREW	3						
106	XTV3+6GFZ	SCREW	1						
107	XTV3+6F	SCREW	1						
108	XTV3+12F	SCREW	2						
109	XTV3+8G	SCREW	6						
110	XTV4+10J	SCREW	6						
111	XTV4+10JFR	SCREW	17						
112	XTV4+12G	SCREW	9						
113	XTV4+15G	SCREW	9						
114	XWV9	WASHER	1						
115	XYN3+F6	SCREW	5						

CHSSIS FRAME ASSEMBLY




Components identified with the mark  have the special characteristics for safety. When replacing any of these components, use only the same type.

CHASSIS FRAME ASSEMBLY

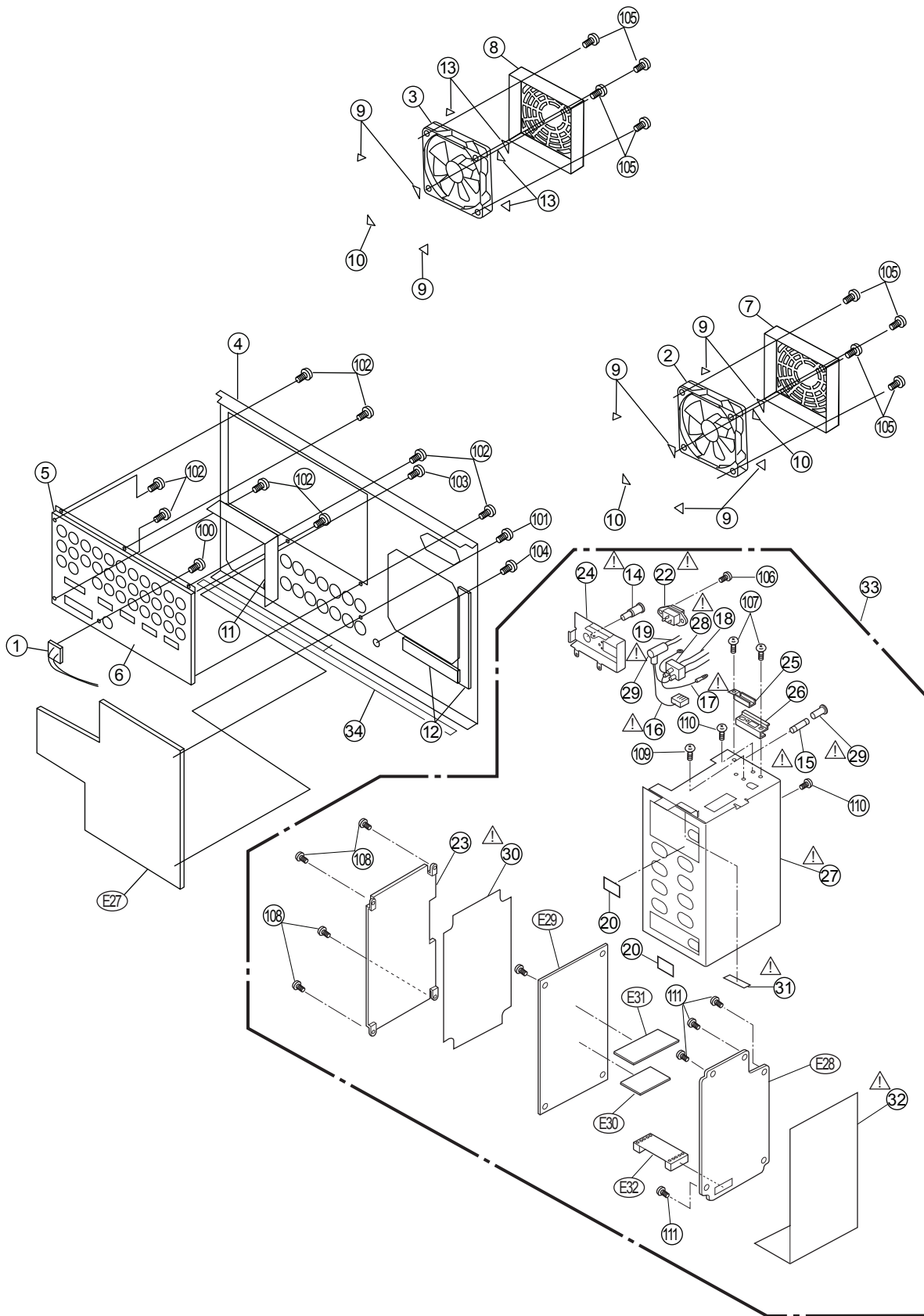
Components identified with the mark have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.	Part No	Part Name & Description	Pcs	Remarks
1	VMP7040	FRONT FRAME	1	
2	VGf0173	RUBBER BUSHING	1	
3	VGQ2557	EMERGENCY GUIDE GEAR	1	
4	VJF1052	RAIL	12	
5	VMG0630	GROMMET	2	
6	VMG0953	E-E CAP	1	
7	VXP6795	SIDE FRAME (L) ASS'Y		
11	VGf0799	DUST PROOF SHEET (C)	2	
12	VGf0815	SHEET (E)	4	
13	VMT1041	DUST PROOF CUSHION	4	
16	VGf0840	DUST PROOF	4	
17	VYQ1990	ROTARY BRACKET (L)	1	
18	VJR3	WIRE CLAMPER	15	
19	VXA6796	SIDE FRAME (R) ASS'Y	1	
20	VYQ1991	ROTARY BRACKET (L)	1	
21	VMP6511	CENTER FRAME	1	
22	VMP6493	POWER ASSY HOLDER ANGLE	1	
23	VJF0022	WIRE SADDLE	1	
24	VGQ1543	EDGE GUARD	1	
25	VMP6962	P.C.B. HOLDER ANGLE R	1	
26	VMP6501	POWER SW HOLDER ANGLE	1	
Δ 27	VMZ2137	SWITCH COVER	1	
28	VSC5119	POWER CABLE SHIELD ANGLE	1	
Δ 29	K0AALF000016	AC SWITCH	1	
Δ 30	VEE0L64	POWER SW1 CABLE	1	
Δ 31	VEE0L69	POWER SW2 CABLE	1	
32	VMP6514	S P.C.B. HOLDER ANGLE	1	
33	VXA5721	CHASSIS FRAME	1	
34	VMP6512	ANGLE	1	
35	VMP6611	COVER	1	
36	VMG1349	RUBBER SHEET (A)	1	
37	VMG1350	RUBBER SHEET (B)	1	
38	VMT1242	RUBBER SHEET (C)	1	
39	VMZ3192	INSULATION SHEET (A)	1	
40	VMZ3072	INSULATION SHEET (B)	1	
41	VMZ3073	INSULATION SHEET (C)	1	
42	VMP7039	L P.C.B. HOLDER ANGLE	1	
44	VEE0L41	AT. POWER 2 CABLE	1	P3-CN3
45	VEE0L42	CYLINDER 1 CABLE	1	
46	VEE0L43	CYLINDER 2 CABLE	1	
47	VEE0L44	CYLINDER 3 CABLE	1	
48	VEE0L45	CYLINDER 4 CABLE	1	
49	VEE0L46	REC AMP1 CABLE	1	
50	VEE0L47	REC AMP2 CABLE	1	
51	VEE0L49	HEAD INT CABLE	1	P406
52	VEE0L65	CYLINDER 5 CABLE	1	
53	VEE0L66	CYLINDER 6 CABLE	1	
Δ 54	VEE0L64	POWER SW1 CABLE	1	
Δ 55	VEE0L69	POWER SW2 CABLE	1	
56	VEE0L75	CABLE	1	SUB MOTHER-FRONT
57	VEE0E13500	CABLE (PINK, SHORT)	2	
58	VEE0E14500	CABLE (ORANGE, SHORT)	1	
59	VEE0E15500	CABLE (GREEN, SHORT)	1	
60	VEE0E49500	CABLE (YELLOW, SHORT)	2	
61	VEE0E12600	CABLE (BLACK, LONG)	2	K1TZA9A00002
62	VEE0E13600	CABLE (PINK, LONG)	1	K1TZA9A00008
63	VEE8373	SUB MOTHER MECH CABLE	1	
64	K1PB80B00001	MECHA CONNECT CABLE	1	
65	VEE0E14600	CABLE (ORANGE LONG)	1	K1TZA9A00006
66	VEE0E15600	CABLE (GREEN LONG)	1	K1TZA9A00004
67	VEC0970	AT. POWER1	1	CN1,CN2
68	VEC0971	ATD 1	1	P2,P9102
69	VEC0972	SERVO CTL1	1	
70	VEC0974	AC HEAD CABLE	1	
71	VMP6519	LP PLATE GUIDE ANGLE L	1	
72	VGQ1924	P.C.BOARD GUIDE RAIL	10	
73	VMP6520	LP PLATE GUIDE ANGLE R	1	
74	VXA6809	BNC HOLDER ANGLE	1	
75	VGf0763	DUST PROOF SHEET (C)	2	
76	VXA7045	LP PLATE HOLDER	1	
77	VHD0277	SCREW	3	
84	VMP6507	SOP PLATE HOLDER	1	
85	VMT1147	SOP PLATE HOLDER SHEET	1	
86	VEE8647	REMOTE CONTROL CABLE	1	
87	VMP6502	FRONT CONNECT ANGLE	1	
88	VMP6515	S P.C.B. SUPPORT ANGLE	1	


[illegible]

Components identified with the mark  have the special characteristics for safety.
When replacing any of these components, use only the same type.

REAR JACK PANEL ASSEMBLY

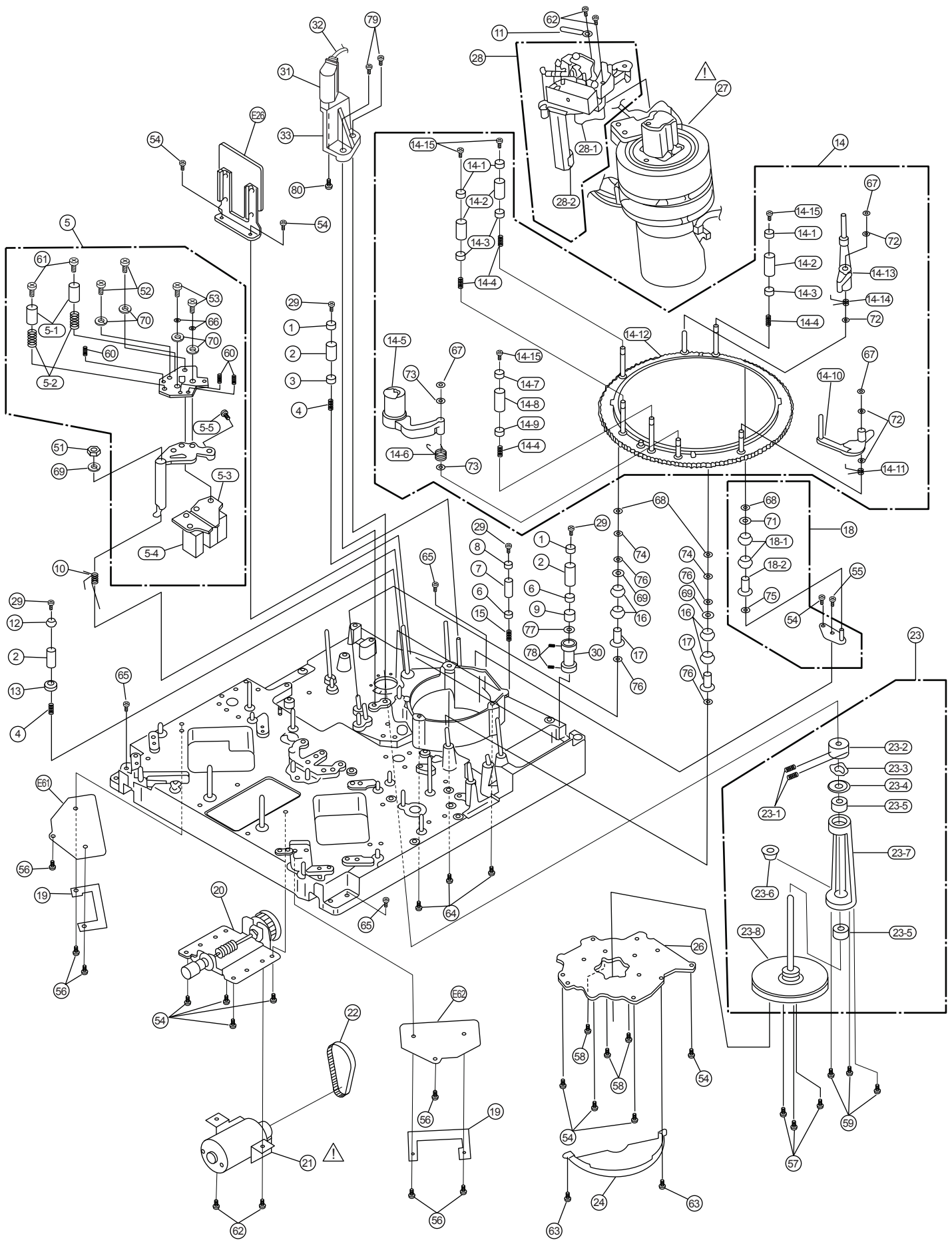


REAR JACK PANEL ASSEMBLY

Components identified with the mark  have the special characteristics for safety. When replacing any of these components, use only the same type.

[illegible][illegible]

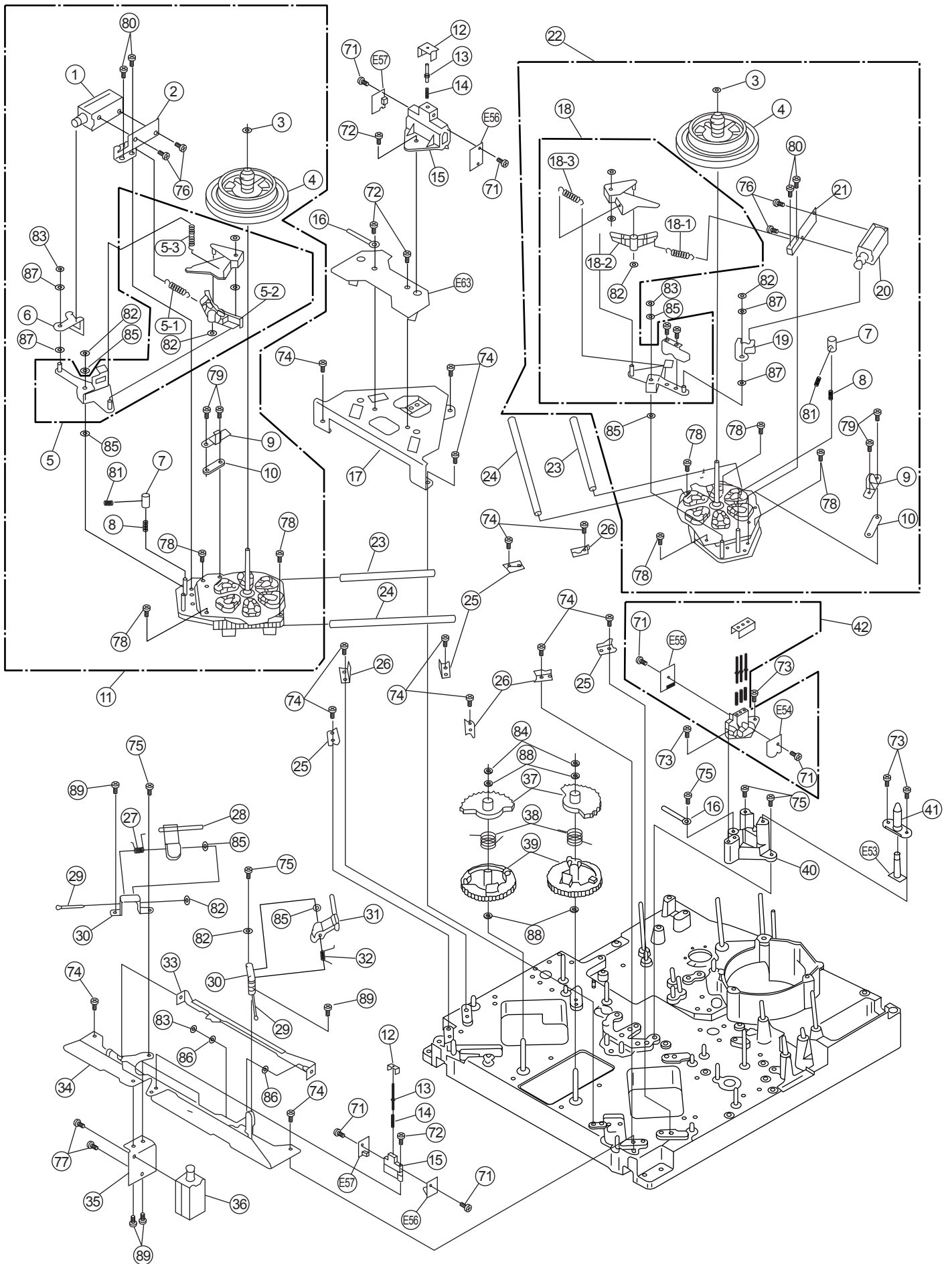
MECHANICAL COMPONENT ASSEMBLY(1)



MECHANICAL COMPONENT ASSEMBLY (1)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VXA2271	UPPER FLANG	2		61	XYN3+F18	SCREW	2	
2	VXP0819	POST ROLLER	3		62	XYN3+F6	SCREW	4	
3	VMS2800	LOWER FLANGE	1		63	XYNV26+K4S	SCREW	2	
4	VMB1379	POST SPRING	2		64	XYNV3+K10S	SCREW	3	
5	VED0351	A/C HEAD ASSY	1 (M)		65	XYN4+C14S	SCREW	3	
5-1	VMX1441	ADJUST LOCK COLLAR	2		66	XWA26B	WASHER	2	
5-2	VMB1843	ADJUST SPRING	2		67	XUC25FP	E-RING	3	
5-3	VBR0188	A/C HEAD	1		68	XUC3FP	E-RING	3	
5-4	VBR0189	MONITOR HEAD	1		69	XWE4	WASHER	3	
5-5	VHD0797	SCREW	1		70	XWG26	WASHER	4	
6	VMX1161	P4 BEARING HOLDER	2		71	XWE4	WASHER	1	
7	VXP0938	POST ROLLER	1		72	XWGV3D6G	WASHER	4	
8	VMS3703	UPPER FLANGE	1		73	XWGV3Y6G	WASHER	2	
9	VMB1653	BEARING SPRING	1		74	XWGV4D7G	WASHER	2	
10	VMB2147	A/C HEAD SPRING	1		75	XWGV4F9G	WASHER	1	
11	VJR3	WIRE CLAMPER	1		76	XWGV4Y7G	WASHER	4	
12	VMS3712	UPPER FLANGE	1		77	XWGV2D6G	WASHER	1	
13	VXA2272	BOTTOM FLANG	1		78	XXE2C3FP	SCREW	2	
14	VXP1966	LOADING LING ASS'Y	1		79	XYN3+K10	SCREW	2	
14-1	VMS3638	UPPER FLANGE	3		80	XQN2+A35FZ	SCREW	1	
14-2	VXP0821	POST ROLLER	3						
14-3	VMS2803	LOWER FLANGE	3						
14-4	VMB1377	POST SPRING	4		E26	VEP82234A	SERVO CONTROL P.C.BOARD	1	
14-5	VXL2926	PINCH ROLLER ARM ASS'Y	1		E61	VEP80644A	REEL I/F (S) P.C.BOARD	1	
14-6	VMB2301	PINCH ARM RESET SPRING	1		E62	VEP80645A	REEL I/F (T) P.C.BOARD	1	
14-7	VMS4617	UPPER FLANGE	1						
14-8	VXP1294	ROLLER	1						
14-9	VMS4620	LOWER FLANGE	1						
14-10	VXL2105	M LOADING ARM ASS'Y	1 (M)						
14-11	VMB2299	LOADING ARM RESET SPRING	1						
14-12	VXP1287	LOADING RING	1						
14-13	VXL2317	T. BUFFER ARM ASS'Y	1						
14-14	VMB2607	T. BUFFER SPRING	1						
14-15	VHD0789	SCREW	4						
15	VMB2477	POST SPRING	2						
16	VDP1010	RING ROLLER	4						
17	VMX1297	RING ROLLER SLEEVE (A)	2						
18	VXR0215	RING ROLLER ASS'Y	1						
18-1	VDP1010	RING ROLLER	2						
18-2	VMX1995	RING ROLLER COLLAR B	1						
19	VMD1730	CABLE HOLDER	2						
20	VXA4407	WORM BASE	1						
21	VEM0397	MOTOR ASSY	1 (M)						
22	VDV0231	TIMING BELT	1						
23	VXP1489KIT	CAPSTAN KIT	1						
23-1	XXEV3W5FP	SCREW	2						
23-2	VDB0915	PRESSER BOSS	1						
23-3	VMB0536	WAVE WASHER	1						
23-4	VDB0914	HOLDER	1						
23-5	VDB1259	BEARING	2						
23-6	VMX1343	BEARING COVER	1						
23-7	VDB0932	HOUSING	1						
23-8	VXP1489	ROTOR FOR VXP1489KIT	1						
24	VSC2066	CAPSTAN MOTOR COVER	1						
26	VEK3699	CAPSTAN STARTOR P.C.BOARD	1						
27	VEG1556	CYLINDER UNIT (A)	1 (M)						
28	VXA6993	CLEANER ASS'Y	1						
28-1	VSJ0218	CLEANER SOLENOID	1	L9AAABEB0010					
28-2	VXP1326	CLEANER ROLLER ASS'Y	1						
29	VHD0798	SCREW	4						
30	VMX2314	P5 TILT COLLAR	1						
31	VBR0314	PRE CTL HEAD	1						
32	VEE0L15	CABLE	1						
33	VMD4065	PRE CTL HOLDER	1						
51	XNG4ES	NUT	1						
52	XVE26B12FP	SCREW	2						
53	XVE26B6FP	SCREW	4						
54	XTV3+6F	SCREW	11						
55	XTV3+6FFZ	SCREW	1						
56	XTV3+8F	SCREW	6						
57	XYN2+C10S	SCREW	3						
58	XYN2+C6V	SCREW	3						
59	XYN26+C7V	SCREW	3						
60	XXE3A8FP	SCREW	3						

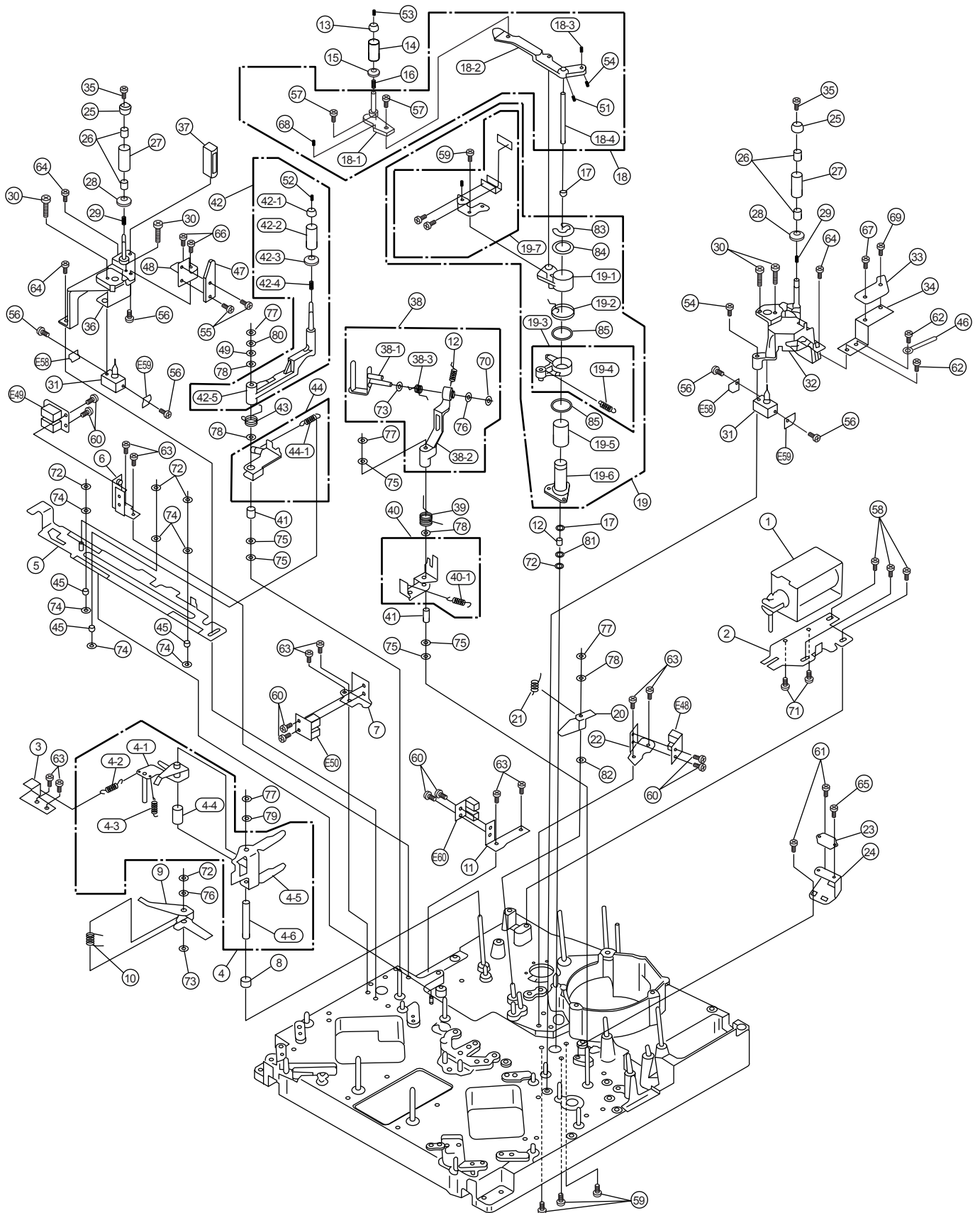
MECHANICAL COMPONENT ASSEMBLY(2)



MECHANICAL COMPONENT ASSEMBLY (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VSJ0228	BRAKE SOLENOID	1	L9AAACFB0017	E54	VEP80642A	DETECT BIT (R) P.C.BOARD	1	
2	VMA8410	S SOLENOID BRACKET	1		E55	VEP80655A	DETECT BIT (L) P.C.BOARD	1	
3	VMX2006	CASSETTE WASHER	2		E56	VEP80641A	SENSOR P.C.BOARD	2	
4	VXR0230	REEL TABLE	2		E57	VEP80652A	LED P.C.BOARD	2	
5	VXL2423	SUPPLY BRAKE ASS'Y	1		E63	VEP80640A	PHOTO P.C.BOARD	1	
5-1	VMB2688	BRAKE SPRING (2)	2						
5-2	VXL2423	SUPPLY BRAKE ASS'Y	2	<R21,R22>					
5-3	VMB2746	BRAKE SPRING (1)	2						
6	VMA8416	S BRAKE ANGLE	1						
7	VMX0803	CASSETTE HOLDER	2						
8	VMB1377	POST SPRING	2						
9	VBK0168	MR SENSOR	2	EZMPD01YN02S					
10	VMA8415	MR SENSOR PLATE	2						
11	VXA7266	S REEL BASE (S) ASS'Y	1						
12	VMD1707	DET BIT CAP (T)	2						
13	VXJ0096	DET PIT PIN ASS'Y	2						
14	VMB2280	DET BIT SPRING	2						
15	VMD1705	DET BIT HOLDER (T)	2						
16	VJF0620	HARNESS CLAMP	2						
17	VMA8375	PHOTO DET BASE	1						
18	VXL2424	TAKE UP BRAKE ASS'Y	1						
18-1	VMB2688	BRAKE SPRING (2)	2						
18-2	VXL2119	BRAKE SHOE ASS'Y	1						
18-3	VMB2746	BRAKE SPRING (1)	1						
19	VMA8417	T BRAKE SOLENOID ANGLE	1						
20	VSJ0228	BRAKE SOLENOID	1	L9AAACFB0017					
21	VMA8409	T SOLENOID BRACKET	1						
22	VXA7267	T REEL BASE (S) ASS'Y	1						
23	VMS4633	RAIL B	2						
24	VMS4632	RAIL A	2						
25	VMA8449	RAIL HOLDER A	4						
26	VMA8450	RAIL HOLDER B	4						
27	VMB2312	LC STOPPER SPRING (L)	1						
28	VXA4416	LC STOPPER (L) ASS'Y	1						
29	VMS3983	SELECT GUIDE SHAFT	2						
30	VMA8420	LC STOPPER HOLDER	2						
31	VXA4414	LC STOPPER (R) UASS'Y	1						
32	VMB2311	LC STOPPER SPRING (R)	1						
33	VXL2099	LC STOPPER DRIVE LEVER	1						
34	VXA4390	LC STOPPER BASE	1						
35	VMA8419	SOLENOID HOLDER	1						
36	VSJ0102	LC STOPPER SOLENOID	1	L9AAACFB0014					
37	VDG0757	REEL BASE DRIVE GEAR	2						
38	VMB2310	CHARGE SPRING	2						
39	VDG0756	REEL BASE DRIVE GEAR	2						
40	VMD1703	DETECTION BIT BASE	1						
41	VMD1704	LED SENSOR CAP	1						
42	VES0628	DETECTION BIT ASS'Y	1						
71	XQN2+AJ5	SCREW	6						
72	XTV26+5F	SCREW	4						
73	XTV26+8G	SCREW	4						
74	XTV3+6F	SCREW	13						
75	XTV3+8F	SCREW	5						
76	XYN26+C4	SCREW	4						
77	XYN26+F4FZ	SCREW	2						
78	XYN26+C5	SCREW	8						
79	XYNV26+K10	SCREW	4						
80	XYNV26+K5	SCREW	4						
81	XXEV3W4FP	SCREW	2						
82	XUC25FP	E-RING	6						
83	XUC2FP	E-RING	3						
84	XWGV4D11G	WASHER	2						
85	XWGV3D6G	WASHER	6						
86	XWGV3Y6G	WASHER	2						
87	XWGV3Y8G	WASHER	4						
88	XWGV4D9G	WASHER	4						
89	XYN3+C6	SCREW	4						
E53	VEP00P03D	LED SENSOR P.C.BOARD	1						

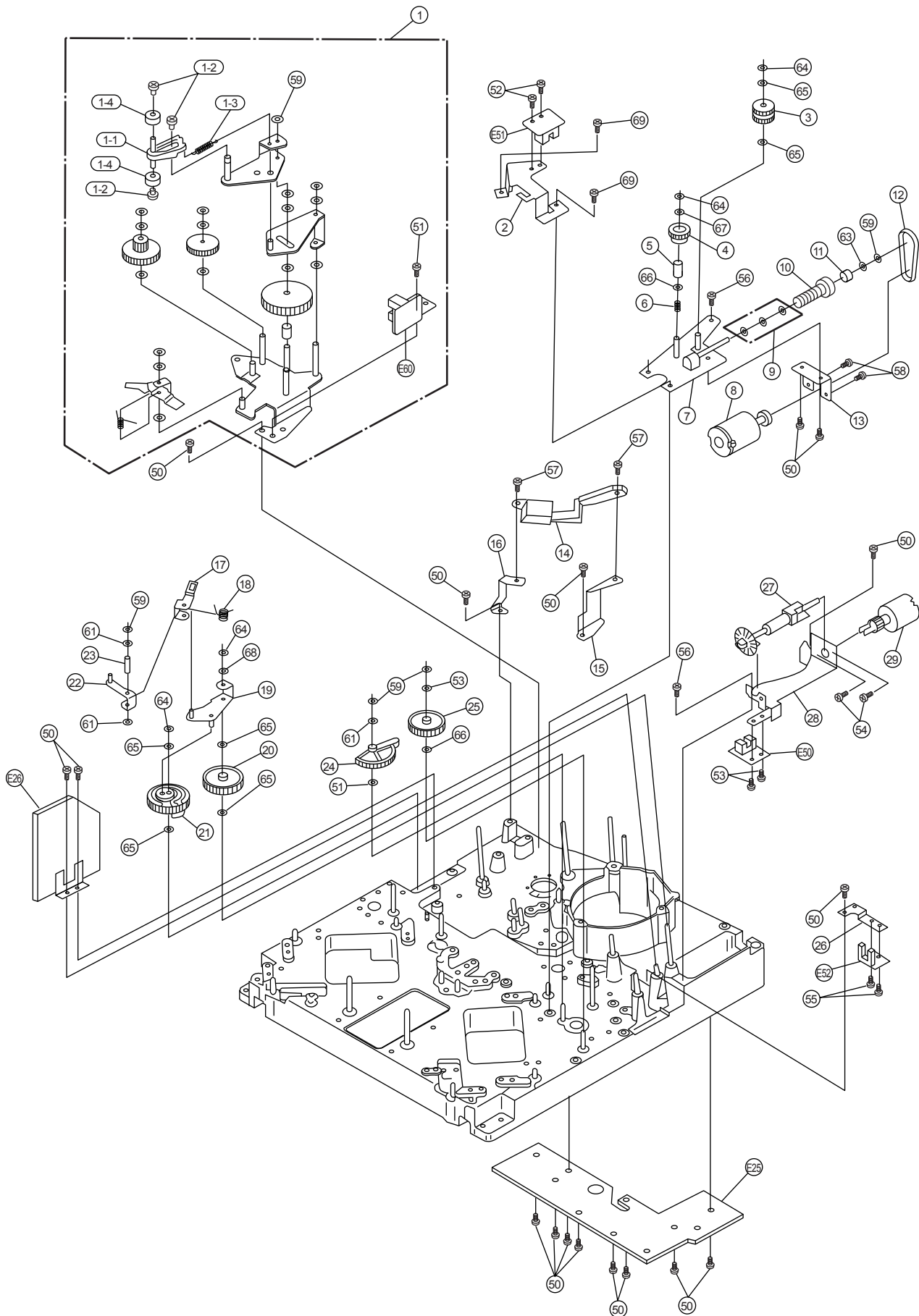
MECHANICAL COMPONENT ASSEMBLY(3)



MECHANICAL COMPONENT ASSEMBLY (3)

[illegible]

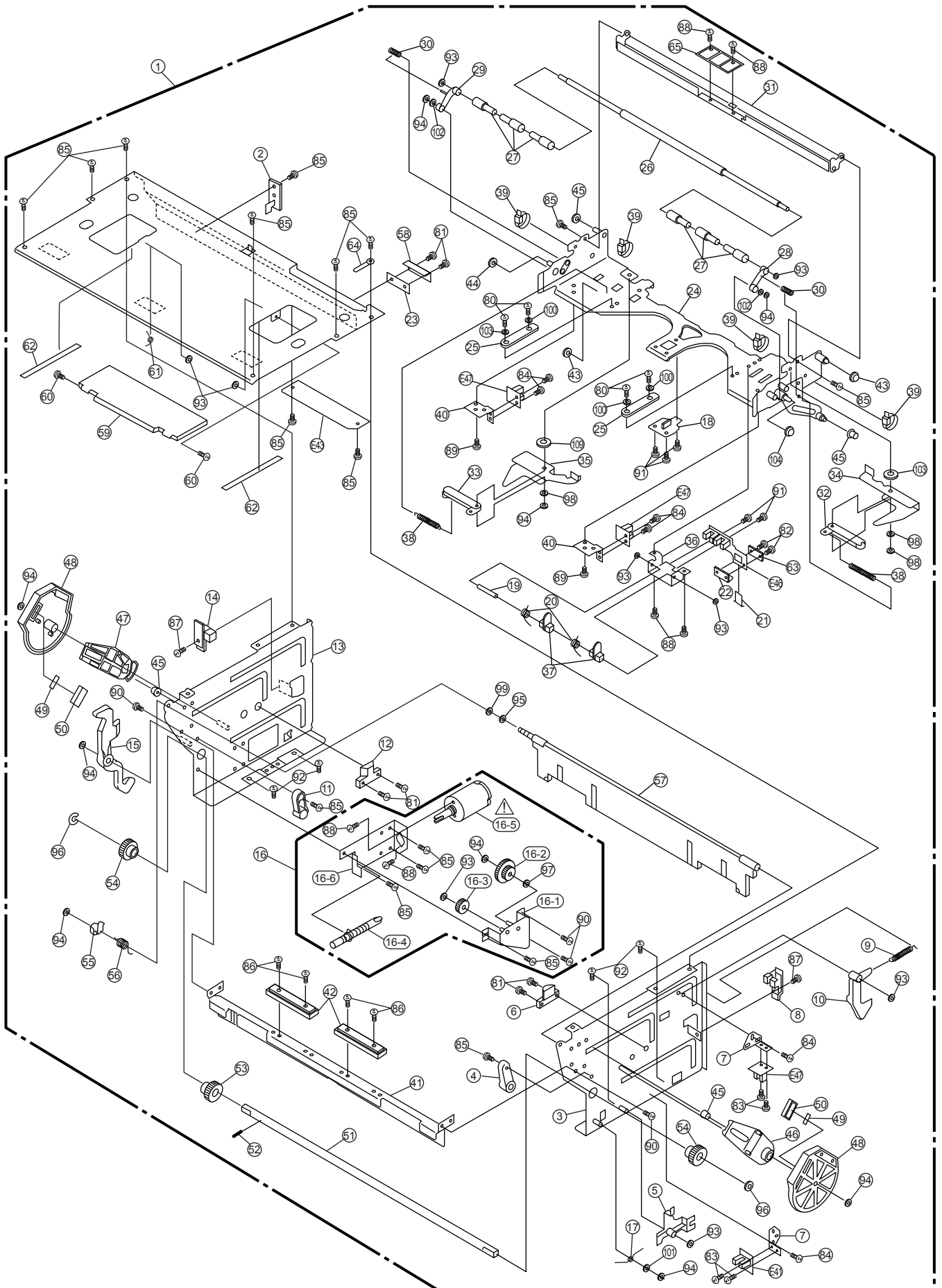
MECHANICAL COMPONENT ASSEMBLY(4)



MECHANICAL COMPONENT ASSEMBLY (4)

[illegible]

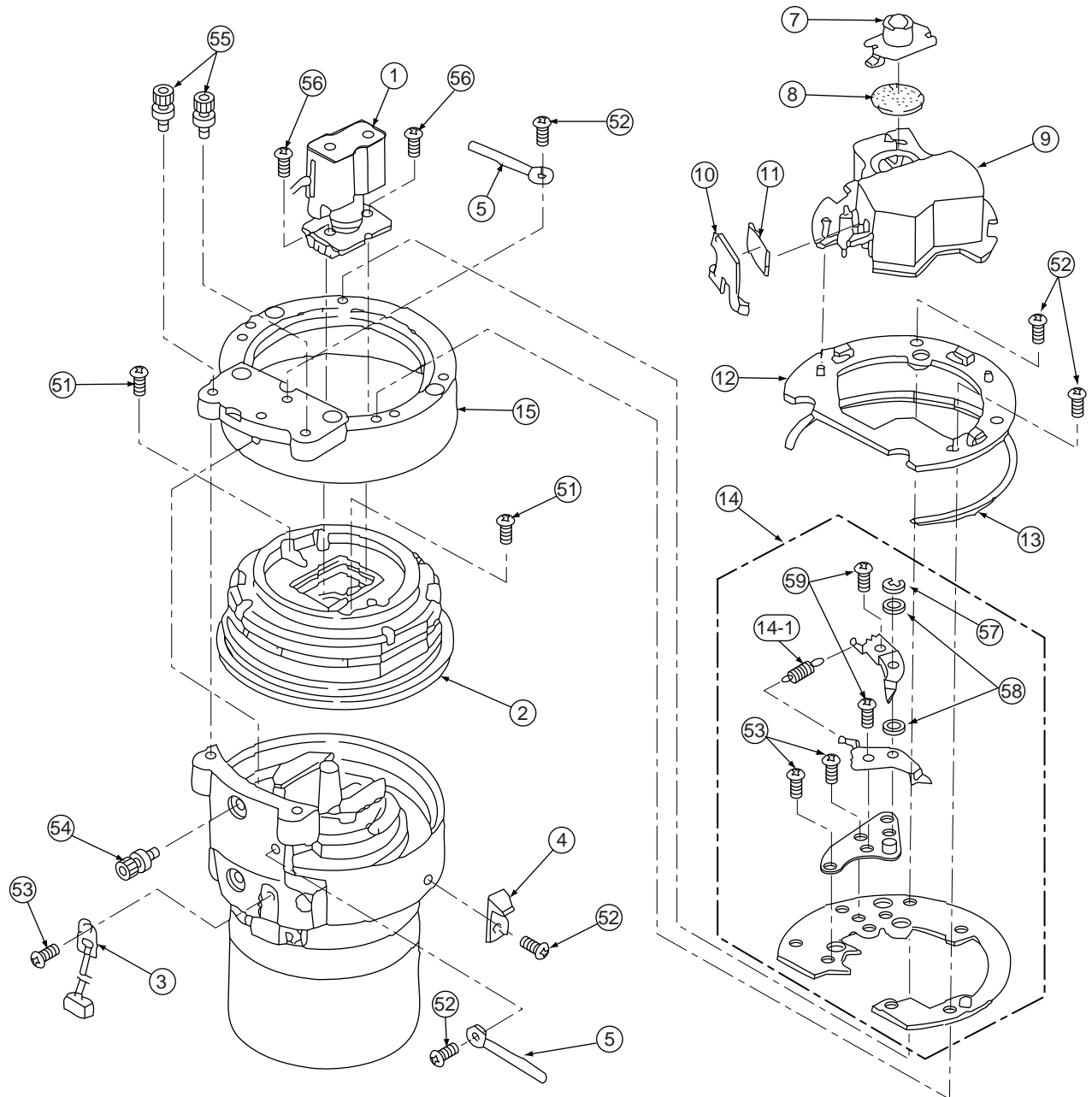
CASSETTE COMPARTMENT ASSEMBLY



CASSETTE COMPARTMENT ASSEMBLY

[illegible]


CYLINDER ASSEMBLY

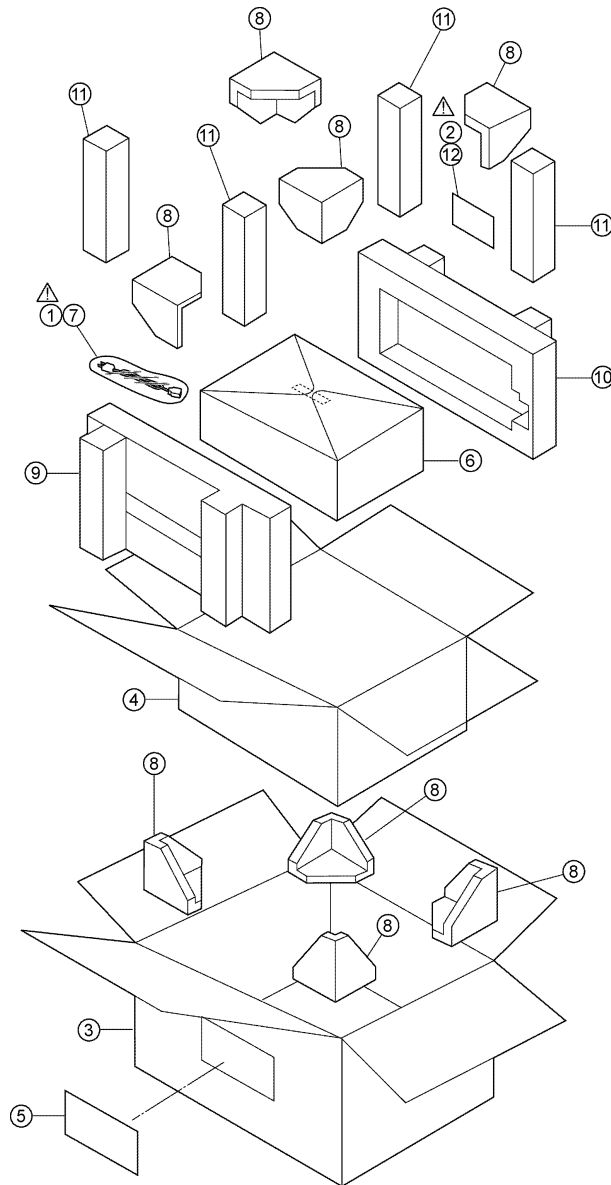


CYLINDER ASSEMBLY

[illegible]

PACKING PARTS ASSEMBLY

Components identified with the mark  have the special characteristics for safety. When replacing any of these components, use only the same type.



PACKING PARTS ASSEMBLY

[illegible]

ELECTRICAL REPLACEMENT PARTS LIST (AJ-HD3700HP)

[illegible]

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP83563A	D5 REC PB P.C.BOARD	1	(RTL)	C4048	EEVHB1A330	E.CAPACITOR 10V 33U	1	
					C4049,50	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
					C4051,52	EEVHB1A330	E.CAPACITOR 10V 33U	2	
					C4053,54	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C3000-08	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9		C4055	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C3009	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C4056	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3010-12	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4057-63	EEVHB1A330	E.CAPACITOR 10V 33U	7	
C3013	EEVHP1H1R0	E.CAPACITOR 50V 1U	1		C4064,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3014-18	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5		C4066	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C3019,20	EEVHB1A330	E.CAPACITOR 10V 33U	2		C4067-69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C3021,22	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4070-72	EEVHB1A330	E.CAPACITOR 10V 33U	3	
C3023,24	EEVHB1A330	E.CAPACITOR 10V 33U	2		C4073	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3025-27	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4075	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3029-43	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	15		C4076-87	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	12	
C3045-49	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5		C4088	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C3051	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4089-91	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C3053	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4094	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3055-58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		C4096-98	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C3061-69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9		C4100,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3070	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1		C4102,03	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C3071	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		C4104-07	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C3072-90	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	19		C4108	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C3091,92	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2		C4109-12	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C3093-95	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4113	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C3100-06	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	7		C4114	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3107	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C4115	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3109-11	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4116-28	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	13	
C3112	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1		C4129	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3113-16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		C4130,31	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3117	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1		C4132,33	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C3118,19	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4134,35	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	2	
C3120-23	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4		C4136,37	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3126-35	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	10		C4139	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3136-39	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4		C4140,41	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3142-52	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	11		C4144-52	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9	
C3155	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4153,54	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3157-63	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	7		C4155,56	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C3167	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1		C4157,58	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	2	
C3168	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		C4160	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3169	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4161,62	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3171,72	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4165	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3174,75	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4169-76	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C3177,78	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4178,79	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	2	
C3180-17	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	38		C4180,81	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3218	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1		C4182-84	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	3	
C3219-35	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	17		C4185	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3236	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		C4186	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C3240,41	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4187	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3243	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4188	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C3245-57	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	13		C4189	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4001-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4190	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4004-06	EEVHB1A330	E.CAPACITOR 10V 33U	3		C4191	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C4007-10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		C4219-33	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	15	
C4011-13	EEVHB1A330	E.CAPACITOR 10V 33U	3		C4256	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4014	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4258-60	EEVHB1A330	E.CAPACITOR 10V 33U	3	
C4015	EEVHB1A330	E.CAPACITOR 10V 33U	1		C4263	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4016,17	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4275-91	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	17	
C4018-20	EEVHB1A330	E.CAPACITOR 10V 33U	3		C4292	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C4021	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4293	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C4022	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4294-01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C4023	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4302	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C4024	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4303	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C4025	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4304-22	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	19	
C4026,27	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4323	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C4028	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4324,25	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C4029	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		C4326,27	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2	
C4030	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4328	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4031	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4330-34	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
C4032	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1		C4336-40	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
C4033	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		C4342	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4034	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4700-07	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C4035,36	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2		C4708	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4037-43	EEVHB1A330	E.CAPACITOR 10V 33U	7		C4709-20	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	12	
C4044	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		C4800-05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
C4045-47	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4806-09	EEVHB1C100	E.CAPACITOR 16V 10U	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4810-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6		IC3060	TLCX125FT	IC	1	
C4818,19	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC3061,62	HM530281R20	IC	2	C3HBJC000001
C4822	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		IC3063	TC7W125FU	IC	1	
C4823	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1		IC3064	L7A1393	IC	1	C1AA00000221
C4824	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1		IC3065-67	D434008ALL15	IC	3	C3BBKC000036
C4825	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		IC3068	TLCX257FT	IC	1	
C4826-29	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		IC3069	LVX3245QSC	IC	1	
C4832,33	EEVHB1A330	E.CAPACITOR 10V 33U	2		IC3070	D67821GM022	IC	1	C1ZBZ0001590
C4834,35	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	2		IC3071	TLCX125FT	IC	1	
C4836-39	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		IC3072-75	TC7SH04FU	IC	4	
C4900-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		IC3076	TLCX74FT	IC	1	
C4904,05	EEVHB1C100	E.CAPACITOR 16V 10U	2		IC3077	TC7SH04FU	IC	1	
C4906-11	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6		IC3078,79	TLCX74FT	IC	2	
C4914	EEVHB1C100	E.CAPACITOR 16V 10U	1		IC3080	TC7SH32FU	IC	1	
C4915,16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC3081	TC7SH08FU	IC	1	
C4917	EEVHB1A330	E.CAPACITOR 10V 33U	1		IC3082,83	LVX3245QSC	IC	2	
C4918	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC3084	TLCX245FT	IC	1	
C4919	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1		IC3085	HM530281R20	IC	1	C3HBJC000001
C4920	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		IC3086	LVX3245QSC	IC	1	
C4921	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC3087	HM530281R20	IC	1	C3HBJC000001
C4922	EEVHB1A330	E.CAPACITOR 10V 33U	1		IC3088	LVX3245QSC	IC	1	
C4924-26	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		IC3089	HM530281R20	IC	1	C3HBJC000001
C4928	EEVHB1A330	E.CAPACITOR 10V 33U	1		IC3090	LVX3245QSC	IC	1	
C4929	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1		IC3091	HM530281R20	IC	1	C3HBJC000001
C4930	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC3092-94	D4564163A10B	IC	3	
C4931	ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1		IC3095	EPF10K50E203	IC	1	C1ZBZ0001222
C4940-43	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	4		IC3096	TC7SH04FU	IC	1	
C4944-60	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	17		IC3097,98	IDTLVC16374F	IC	2	
					IC3099	IDTLVC16245F	IC	1	
D3000,01	MA3J14300L	DIODE	2		IC3100	TC7SH04FU	IC	1	
D4001-08	MA152A	DIODE	8		IC3101	TC7W32FU	IC	1	
					IC3102,03	MB10HL116PF	IC	2	
IC3000-02	DS90LV048A	IC	3		IC3104	TLCX245FT	IC	1	
IC3003	IDTLVC16245F	IC	1		IC4001	LT1573CS8	IC	1	
IC3004,05	IDTLVC574APG	IC	2		IC4002-05	NJM360M	IC	4	C0BBZ0000001
IC3006	TLCX125FT	IC	1		IC4006	EPF10K50E143	IC	1	C1ZBZ0001230
IC3007	TC7SH32FU	IC	1		IC4007	TC7SH04FU	IC	1	
IC3008	TC7S86FU	IC	1		IC4008	C0ABHA000020	IC	1	
IC3009	IDTLVC16374F	IC	1		IC4009,10	TC7SH04FU	IC	2	
IC3010	NJM062V	IC	1		IC4011	TVHT244FT	IC	1	
IC3011	TC7S04FU	IC	1		IC4012	C0ABHA000020	IC	1	
IC3012	XC62FP5002P	IC	1		IC4013	MC74HC4046AF	IC	1	C0JBAZ000153
IC3013	XC62DN5002P	IC	1		IC4015	TVHT244FT	IC	1	
IC3015	TLCX541FT	IC	1		IC4016	TLCX245FT	IC	1	
IC3016	IDTLVC16245F	IC	1		IC4017	MC74HC4046AF	IC	1	C0JBAZ000153
IC3017	EPF10K50E203	IC	1	C1ZBZ0001222	IC4018	TLCX245FT	IC	1	
IC3018	IDTLVC16245F	IC	1		IC4019,20	MC74HC4046AF	IC	2	C0JBAZ000153
IC3019,20	IDT70V25L25F	IC	2		IC4021	TLCX245FT	IC	1	
IC3021	M66282F	IC	1		IC4022	TVHT244FT	IC	1	
IC3022	TC7SH04FU	IC	1		IC4023	TC75W54FU	IC	1	
IC3023	M66282F	IC	1		IC4025	SN74LS628NS	IC	1	
IC3024,25	IDTLVC16374F	IC	2		IC4026	TC7SH04FU	IC	1	
IC3026	TC7S04FU	IC	1		IC4027	TLCX245FT	IC	1	
IC3027	DS90CR218MTD	IC	1		IC4028	MB87D136APFV	IC	1	C1ZBZ0001517
IC3028,29	IDTLVC16374F	IC	2		IC4029	TVHT244FT	IC	1	
IC3030	C3ZBJ0000007	IC	1		IC4030	LT1129CS8	IC	1	
IC3031	TLCX125FT	IC	1		IC4031	TVHC245FT	IC	1	
IC3032,33	C3ZBJ0000007	IC	2		IC4032	C3ZBJ0000007	IC	1	
IC3034	TC7SH04FU	IC	1		IC4033	TVHC74FT	IC	1	
IC3035	C3ZBJ0000007	IC	1		IC4034,35	TLCX257FT	IC	2	
IC3036	TC7W04FU	IC	1		IC4036	TVHT244FT	IC	1	
IC3039	TLCX04F	IC	1		IC4037	MB87D136APFV	IC	1	C1ZBZ0001517
IC3040	C3ZBJ0000007	IC	1		IC4038	TVHT244FT	IC	1	
IC3041	TLCX541FT	IC	1		IC4039	TVHC74FT	IC	1	
IC3042	LVX3245QSC	IC	1		IC4040	C1BB00000620	IC	1	
IC3043	C3ZBJ0000007	IC	1		IC4041	EPF10K50E203	IC	1	C1ZBZ0001222
IC3044,45	LVX3245QSC	IC	2		IC4042-44	C1BB00000620	IC	3	
IC3046	C3ZBJ0000007	IC	1		IC4045,46	TLCX245FT	IC	2	
IC3047	LVX3245QSC	IC	1		IC4047	MN47V76SP	IC	1	
IC3048	C3ZBJ0000007	IC	1		IC4048	LT1573CS8	IC	1	
IC3049	MB10HL124PFF	IC	1	C0JBZZ000215	IC4063,64	C3ZBJ0000007	IC	2	
IC3050	TLCX240FT	IC	1		IC4065	TLCX245FT	IC	1	
IC3051	MB10HL124PFF	IC	1	C0JBZZ000215	IC4066	LVX3245QSC	IC	1	
IC3052	MC10EL57D	IC	1	C0JBZZ000113	IC4067,68	C3ZBJ0000007	IC	2	
IC3053-55	MB10HL116PF	IC	3		IC4069,70	LVX3245QSC	IC	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4071-74	C3ZBJ000007	IC	4		Q3003	2SK1748-Z	TRANSISTOR	1	
IC4098	TVHC244FT	IC	1		Q4001	2SB1202-S	TRANSISTOR	1	
IC4099	TVHT244FT	IC	1		Q4002,03	2SC3930	TRANSISTOR	2	
IC4100	EPC2TC32	IC	1		Q4004	2SA1532	TRANSISTOR	1	
IC4101	EPF10K10TC3	IC	1	C0JBAZ001101	Q4005	2SC3930	TRANSISTOR	1	
IC4102	EPC2TC32	IC	1		Q4006	2SA1532	TRANSISTOR	1	
IC4103	C0EBE0000073	IC	1		Q4007,08	2SC3930	TRANSISTOR	2	
IC4104	EPC2TC32	IC	1		Q4009	2SA1532	TRANSISTOR	1	
IC4105	M5256DFP70LL	IC	1	C3BBJC000001	Q4010	2SC3930	TRANSISTOR	1	
IC4106	MN53030VPR	IC	1		Q4011	2SA1532	TRANSISTOR	1	
IC4107	TC7SH04FU	IC	1		Q4012,13	2SC3930	TRANSISTOR	2	
IC4108	M5256DFP70LL	IC	1	C3BBJC000001	Q4014	2SA1532	TRANSISTOR	1	
IC4109	TMSD72274PH	IC	1		Q4015	2SC3930	TRANSISTOR	1	
IC4110	M5256DFP70LL	IC	1	C3BBJC000001	Q4016	2SA1532	TRANSISTOR	1	
IC4111	MN53030VPR	IC	1		Q4017,18	2SC3930	TRANSISTOR	2	
IC4112	TC7SH04FU	IC	1		Q4019	2SA1532	TRANSISTOR	1	
IC4113	M5256DFP70LL	IC	1	C3BBJC000001	Q4020	2SC3930	TRANSISTOR	1	
IC4114	TMSD72274PH	IC	1		Q4021	2SA1532	TRANSISTOR	1	
IC4115,16	C3BBHC000220	IC	2		Q4022,23	2SJ163-Q	TRANSISTOR	2	
IC4117	TLCX257FT	IC	1		Q4024-29	2SC2480	TRANSISTOR	6	
IC4118	UPD65949G076	IC	1		Q4030,31	2SJ163-Q	TRANSISTOR	2	
IC4119,20	C3BBHC000220	IC	2		Q4032-37	2SC2480	TRANSISTOR	6	
IC4121	UPD65949G076	IC	1		Q4038	2SB1202-S	TRANSISTOR	1	
IC4122-24	TVHT244FT	IC	3						
IC4125,26	TLCX245FT	IC	2		QR3000	UN5112	TRANSISTOR-RESISTOR	1	
IC4127,28	TC7SHU04FU	IC	2		QR3001-06	UN5212	TRANSISTOR-RESISTOR	6	
IC4129	EPF10K50E203	IC	1	C1ZBZ0001222	QR3007	UN5112	TRANSISTOR-RESISTOR	1	
IC4130-32	C1BB00000620	IC	3						
IC4133	MN47V76SP	IC	1		R3000-02	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
IC4134	TLCX257FT	IC	1		R3004,05	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC4135	C1BB00000620	IC	1		R3006	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4136	LT1086CM	IC	1	C0CBAYG00001	R3009	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4700,01	SN74S1053PW	IC	2		R3011	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4702,03	LVX3245QSC	IC	2		R3012-16	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
IC4704,05	TLCX245FT	IC	2		R3018-23	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	6	
IC4706	IDTLVC16245F	IC	1		R3024	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC4707	LVX3245QSC	IC	1		R3025	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
IC4708	TLCX245FT	IC	1		R3028	ERJ3RBD471	M.RESISTOR CH 1/16W 470	1	
IC4709	T163G26-1019	IC	1	C1ZBZ0001458	R3029-43	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	15	
IC4710	TLCX245FT	IC	1		R3044	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
IC4711,12	IDTLVC16245F	IC	2		R3045,46	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	2	
IC4800,01	TVHT244FT	IC	2		R3047	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
IC4802-05	MC74HC4046AF	IC	4	C0JBAZ000153	R3048	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
IC4806	TC75W54FU	IC	1		R3049	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
IC4807	NJM2904M	IC	1		R3050	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC4810	TC75W54FU	IC	1		R3051	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
IC4814-17	SN74LS628NS	IC	4		R3052	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4819	TLCX245FT	IC	1		R3053,54	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
IC4900,01	TVHT244FT	IC	2		R3055-67	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	13	
IC4902-04	MC74HC4046AF	IC	3	C0JBAZ000153	R3068	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC4905	NJM2904M	IC	1		R3069-72	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	4	
IC4906	TC7SH04FU	IC	1		R3074-82	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	9	
IC4907	TC75W54FU	IC	1		R3083	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
IC4908	NJM2904M	IC	1		R3084,85	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
IC4911,12	SN74LS628NS	IC	2		R3086-03	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	18	
IC4913	TLCX245FT	IC	1		R3104-11	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	8	
IC4914	LT1129CS8	IC	1		R3116-39	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	24	
IC4920	TLCX245FT	IC	1		R3141	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
ID10	VVVS13698A	SOFTWARE	1		R3142,43	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
L3000,01	VLF1151A132	COIL	2		R3144,45	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
L3002,03	VLQ0319K100	COIL 10UH	2	G1C100K00023	R3146-65	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	20	
L4001-06	VLF1151A132	COIL	6		R3166	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
L4007-09	VLP0183	COIL	3	J0JKC0000007	R3167	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
L4010-15	VLQ0426J1R8	COIL 1.8UH	6	G1C1R8J00007	R3168-71	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
L4016	VLF1151A132	COIL	1		R3172-78	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	7	
P3101	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006	R3179	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
P3201	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006	R3180,81	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
P4001,02	VJP3510	CONNECTOR (MALE)	2	K1KAC8B00004	R3182	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
P4003,04	VJP3887A080	CONNECTOR (MALE)	2	K1KA80A00067	R3183-86	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4	
P4005	VJP3125B008	CONNECTOR (MALE)	1		R3187	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
Q3000-02	2SJ278	TRANSISTOR	3		R3188,89	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
					R3190	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
					R3191,92	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
					R3193	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
					R3194	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4601-04	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	4		VR4800-03	VRV0113B103	V.RESISTOR 10K	4	
R4700-04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	5		VR4900,01	VRV0113B103	V.RESISTOR 10K	2	
R4705-16	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12						
R4717-19	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3		X3000	VSX0670	CRYSTAL OSCILLATOR	1	H1C3605A0002
R4720-27	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	8		X3001	H1C1156B0001	CRYSTAL OSCILLATOR	1	
R4728-35	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8		X3002	H1C1196B0001	CRYSTAL OSCILLATOR	1	
R4736-63	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	28		X3003	H1C1436B0001	CRYSTAL OSCILLATOR	1	
R4764,65	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		X3004	VSX0599	CRYSTAL OSCILLATOR	1	H1A1336A0001
R4800,01	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		X4001-07	VSX1088	CRYSTAL OSCILLATOR	7	
R4802-09	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	8		X4008,09	VSX0453	CRYSTAL OSCILLATOR	2	H0D400500001
R4810-17	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8		X4010	VSX0519	CRYSTAL OSCILLATOR	1	H0D160500011
R4818,19	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2		X4900	VSX1066	CRYSTAL OSCILLATOR	1	H4G1175A0001
R4824,25	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2						
R4828-31	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4				MISCELLANEOUS		
R4834-41	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	8						
R4842-45	ERJ6RBD471	M.RESISTOR CH 1/10W 470	4			VML2143	CARD PULLER	1	
R4846-49	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4			VML2144	CARD PULLER	1	
R4850,51	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2			VMP6526	SUPPORT ANGLE	2	
R4852-54	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	3			XNG26EFS	NUT	4	
R4855	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1			XYN26+C12	SCREW	4	
R4898	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1			VMZ3138	INSULATION SHEET	1	
R4900	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1			VHN0338	NYLON RIVET	6	
R4901-04	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4			VEE0M03	L1 SUB CABLE	1	
R4905	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1						
R4906,07	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2						
R4908-11	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4						
R4914,15	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2						
R4916	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1						
R4917	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		■ E2	VEP84373B	PCM PB SUB P.C.BOARD	1	(RTL)
R4918,19	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2						
R4922-25	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	4						
R4926	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1						
R4927,28	ERJ6RBD471	M.RESISTOR CH 1/10W 470	2		C4001-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R4929,30	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		C4005-09	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
R4931	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C4024-26	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R4932	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C4030-39	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	10	
R4933-36	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4		C4044	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R4937	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		C4045	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
R4938	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		C4046	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
R4940	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		C4047,48	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R4941	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C4054	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R4942-45	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		C4055	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
R4950,51	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		C4056	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
R4952	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C4057,58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R4953	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C4060	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R4954-57	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	4		C4500-05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
R4958	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C4509,10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R4959-64	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	6						
R4965	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4001,02	TVHT244FT	IC	2	
R4966-69	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4003	C1AB00001423	IC	1	
R4970	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4011-13	D434008ALL15	IC	3	C3BBKC000036
R4971-74	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4017	TVHT244FT	IC	1	
R4975	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4018	EPF10K20TC-4	IC	1	C1ZBZ0001281
R4976-79	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4019	EPC2TC32	IC	1	
R4980	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4020	S80745AND9	IC	1	
R4981-84	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4021	TVHT244FT	IC	1	
R4985	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4022	M5256DFP70LL	IC	1	C3BBJC000001
R4986-89	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4026	TMSD72274PH	IC	1	
R4990	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4031	TMSD72274PH	IC	1	
R4991-94	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4032	TVHT244FT	IC	1	
R4995	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4500-05	TLCX245FT	IC	6	
R4996-99	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4506,07	TVHT244FT	IC	2	
TG4001-12	EYF6CU	TEST POINT	12		ID10	VVVS13643	SOFTWARE	1	
TP3000-18	EYF6CU	TEST POINT	19		L4001,02	VLQ0426J1R8	COIL 1.8UH	2	G1C1R8J00007
TP4018-36	EYF6CU	TEST POINT	19						
TP4047-50	EYF6CU	TEST POINT	4		P4001	VJS3886A080	CONNECTOR (FEMALE)	1	K1KB80A00060
TP4062-67	EYF6CU	TEST POINT	6		P4003	VJP3125B008	CONNECTOR (MALE)	1	
TP4075	EYF6CU	TEST POINT	1						
TP4080-83	EYF6CU	TEST POINT	4		R4001,02	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
TP4800-11	EYF6CU	TEST POINT	12		R4004	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
TP4900-08	EYF6CU	TEST POINT	9		R4077	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
					R4078	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R4079	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
					R4080	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
VR4001	VRV0113B103	V.RESISTOR 10K	1						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4081,82	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2						
R4083	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4001,02	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R4084	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4004	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4085	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4077	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4088	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4078	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4089	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4079	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R4509	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R4080	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4510-17	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8		R4081,82	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R4519,20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2		R4083	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4521-29	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	9		R4084	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4530,31	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R4085	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4532	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4088	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4533	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R4089	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4534	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4500	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R4535	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4502-06	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
					R4509	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
TG4500	EYF6CU	TEST POINT	1		R4510-16	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	7	
					R4518	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
TP4002	EYF6CU	TEST POINT	1		R4519,20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
TP4004	EYF6CU	TEST POINT	1		R4521-29	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	9	
TP4009,10	EYF6CU	TEST POINT	2		R4530,31	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
TP4501	EYF6CU	TEST POINT	1		R4532	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
TP4505,06	EYF6CU	TEST POINT	2		R4533	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
					R4534	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
X4001,02	VSX0453	CRYSTAL OSCILLATOR	2	H0D400500001	R4535	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
		MISCELLANEOUS			TG4500	EYF6CU	TEST POINT	1	
	XYN26+K5	SCREW	4		TP4002	EYF6CU	TEST POINT	1	
	VMS6082	SPACER	4		TP4004	EYF6CU	TEST POINT	1	
					TP4009,10	EYF6CU	TEST POINT	2	
					TP4501	EYF6CU	TEST POINT	1	
					TP4505,06	EYF6CU	TEST POINT	2	
■ E3	VEP84373A	PCM PB SUB P.C.BOARD	1	(RTL)	X4001,02	VSX0453	CRYSTAL OSCILLATOR	2	H0D400500001
							MISCELLANEOUS		
						XYN26+K5	SCREW	4	
C4001-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3			VMS6082	SPACER	4	
C4005-09	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5						
C4024-26	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3						
C4030-39	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	10						
C4044	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1						
C4045	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1						
C4046	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1						
C4047,48	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		■ E4	VEP83529A	REC SUB P.C.BOARD	1	(RTL)
C4054	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1						
C4055	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1						
C4056	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1						
C4057,58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C1-C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6	
C4060	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C7	EEVHB0J330	E.CAPACITOR 6.3V 33U	1	
C4500-05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6		C8,C9	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C4509,10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
					C11	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
					C13,14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
IC4001,02	TVHT244FT	IC	2		C15	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
IC4003	C1AB00001423	IC	1		C16	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
IC4011-13	D434008ALL15	IC	3	C3BBKC000036	C17	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
IC4017	TVHT244FT	IC	1		C18,19	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
IC4018	EPF10K20TC-4	IC	1	C1ZBZ0001281	C100,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
IC4019	EPC2TC32	IC	1		C103-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	13	
IC4020	S80745AND9	IC	1		C200-07	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	8	
IC4021	TVHT244FT	IC	1		C208-23	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
IC4022	M5256DFP70LL	IC	1	C3BBJC000001	C600-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
IC4026	TMSD72274PH	IC	1		C606-09	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
IC4031	TMSD72274PH	IC	1		C610	EEVHB1C100	E.CAPACITOR 16V 10U	1	
IC4032	TVHT244FT	IC	1		C611-25	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	15	
IC4500-05	TLCX245FT	IC	6						
IC4506,07	TVHT244FT	IC	2		D100,01	LN1251CAL	DIODE	2	
ID10	VVVS13608	SOFTWARE	1		IC1	LT1086CM	IC	1	C0CBAYG00001
					IC3	LT1573CS8	IC	1	
L4001,02	VLQ0426J1R8	COIL 1.8UH	2	G1C1R8J00007	IC101	S80727ANDQ	IC	1	
					IC102	TVHC244FT	IC	1	
P4001	VJS3886A080	CONNECTOR (FEMALE)	1	K1KB80A00060	IC104	MB29LV160T80	IC	1	
P4003	VJP3125B008	CONNECTOR (MALE)	1		IC108,09	TC7S14FTE85L	IC	2	C0JBAZ0000514

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC200	XCV1KE6B560	IC	1		R288	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC600-03	D434008ALL15	IC	4	C3BBKC000036	R290	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC605	IDT388915TOP	IC	1		R293,94	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IC607	MC10H116M	IC	1	C0JBZZ000018	R296	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R298	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
ID10	VVVS13452	SOFTWARE	1		R300	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
ID20	VVVS13453	SOFTWARE	1		R302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R305,06	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IP100	X9144L7T144	IC	1		R310	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R314	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
L1	VLP0192	COIL	1		R319,20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
L3	VLF1151A132	COIL	1		R322-30	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	9	
L200	VLP0328A102	FERRITE CORE	1		R332	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R335,36	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
P1	VJP4064N160C	CONNECTOR (MALE)	1	K1KBG0A00006	R338	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
P2	VJP3125B010	CONNECTOR (MALE)	1		R340	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
P100,01	VJP3125B008	CONNECTOR (MALE)	2		R342-02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	161	
					R600,01	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
Q1	2SB1202-S	TRANSISTOR	1		R602	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
					R603,04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
QR100,01	UN2214	TRANSISTOR-RESISTOR	2	UNR221400L	R605	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
					R606-08	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R9-16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8		R609	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R17	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1		R610-13	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R18	ERJ6RED470	M.RESISTOR CH 1/10W 47	1		R614-29	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	16	
R20	ERJ6RED750	M.RESISTOR CH 1/10W 75	1		R800	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R23	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1		R801,02	ERDS2TJ471	C.RESISTOR 1/4W 470	2	
R24	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1		R803-06	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	4	
R25,26	ERJ3RBD471	M.RESISTOR CH 1/16W 470	2						
R27	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1		SW100	VSS0367-04B	SWITCH	1	
R28	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1		SW101	VSP1005	SWITCH	1	K0H1BA000148
R29	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1						
R30	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		TG1-G4	EYF6CU	TEST POINT	4	
R31	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1						
R32	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1		TP100-17	EYF6CU	TEST POINT	18	
R33	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1		TP277-82	EYF6CU	TEST POINT	6	
R34	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1		TP284,85	EYF6CU	TEST POINT	2	
R100	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		TP306-12	EYF6CU	TEST POINT	7	
R101	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		TP600-06	EYF6CU	TEST POINT	7	
R104	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		TP700-04	EYF6CU	TEST POINT	5	
R108-10	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	3		TP781-84	EYF6CU	TEST POINT	4	
R113	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1						
R116	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1				MISCELLANEOUS		
R117	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R118	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1						
R119	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1			XYN3+K6	SCREW	4	
R121	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1			VMS4950	P.C.B. POST	4	
R122	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1						
R123	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R124	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1						
R125	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R126	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		■ E5	VEP83530A	PB SUB P.C.BOARD	1	(RTL)
R127	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R128	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1						
R129-31	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3						
R133	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C1,C2	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R134-37	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	4		C3	EEVHB0J330	E.CAPACITOR 6.3V 33U	1	
R138	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C4	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R139	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		C5	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R140-48	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	9		C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R149	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C7	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
R151,52	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C8	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R156	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C9	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
R158,59	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C100,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R161	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C103-16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	14	
R162,63	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		C200-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
R217-23	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	7		C600-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
R224	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C800	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R225-65	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	41						
R266,67	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		D100,01	LN1251CAL	DIODE	2	
R268-70	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3		D200-16	LN1251CAL	DIODE	17	
R272-76	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5		D600-16	LN1251CAL	DIODE	17	
R278-80	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3						
R282	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		IC1	LT1086CM	IC	1	C0CBAYG00001
R285,86	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		IC2	LT1573CS8	IC	1	
					IC101	S80727ANDQ	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC102	TVHC244FT	IC	1						
IC104	MB29LV160T80	IC	1		SW100	VSS0367-04B	SWITCH	1	
IC109,10	TC7S14FTE85L	IC	2	C0JBZ000514	SW101	VSP1005	SWITCH	1	K0H1BA000148
IC200	XCV1KE6B560	IC	1		SW200	VSS0342	SWITCH	1	K0D112B00056
IC600	XCV1KE6B560	IC	1						
					TG1-G4	EYF6CU	TEST POINT	4	
ID10	VVVS13454	SOFTWARE	1						
ID20	VVVS13455	SOFTWARE	1		TP100-17	EYF6CU	TEST POINT	18	
					TP200	EYF6CU	TEST POINT	1	
IP100	X9144L7T144	IC	1		TP509-16	EYF6CU	TEST POINT	8	
					TP917-22	EYF6CU	TEST POINT	6	
L1	VLP0192	COIL	1				MISCELLANEOUS		
P1	VJP4064N160C	CONNECTOR (MALE)	1	K1KBG0A00006					
P100,01	VJP3125B008	CONNECTOR (MALE)	2			XYN3+K6	SCREW	4	
						VMS4950	P.C.B. POST	4	
Q1	2SB1202-S	TRANSISTOR	1						
QR100,01	UN2214	TRANSISTOR-RESISTOR	2	UNR221400L					
R1	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1						
R2	ERJ6RED470	M.RESISTOR CH 1/10W 47	1		■ E6	VEP83503C	PB PROC P.C.BOARD	1	(RTL)
R3	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1		■	VEP83552A	L2 GATE P.C.BOARD	1	FOR VEP83503C
R4	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1		■	VEP83575A	CLK DRV P.C.BOARD	1	FOR VEP83503C
R5	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1						
R6	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1						
R7	ERJ6RBD102	M.RESISTOR CH 1/16W 1K	1						
R8	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		C1	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83552A
R100	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C1	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R101	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C2	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R102-04	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3		C3	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R108-10	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	3		C3	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R113	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C4	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	FOR VEP83575A
R116	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C4	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R117	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C5	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R118	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		C5	EEVHB1A330	E.CAPACITOR 10V 33U	1	FOR VEP83575A
R119	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C6	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R120	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C7	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R121	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C7	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R122	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		C8	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R123	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C8	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R124	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C9-13	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
R125	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C14-18	EEVHB1A330	E.CAPACITOR 10V 33U	5	
R126	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		C19,20	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R127	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C21,22	EEVHB1A330	E.CAPACITOR 10V 33U	2	
R128	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		C23-25	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R129-31	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3		C26,27	EEVHB1A330	E.CAPACITOR 10V 33U	2	
R133	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C28	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R134-37	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	4		C29	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R138	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C30-45	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
R139	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		C46	ECA1CEN470	E.CAPACITOR 16V 47P	1	
R140-51	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	12		C47,48	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R152	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C49,50	EEVHB1A330	E.CAPACITOR 10V 33U	2	
R156	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C51	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R158,59	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C52	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R162,63	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C53	EEVHP1H1R0	E.CAPACITOR 50V 1U	1	
R164	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C54	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R165,66	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		C55	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
R200	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C56	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
R201	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C57,58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R202,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C59	ECA1CEN470	E.CAPACITOR 16V 47P	1	
R204,05	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		C60	EEVHP1H1R0	E.CAPACITOR 50V 1U	1	
R206-88	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	83		C61	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R289	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		C62	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
R290-06	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	17		C63-67	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
R600	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C68	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
R601	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C69	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
R602,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C70,71	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
R604,05	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		C72-74	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R606,07	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C75	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R608	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C76-78	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R609-75	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	67		C79	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
R678,79	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C80	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
R680-96	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	17		C81	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
R800	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1		C82-87	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
					C88,89	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	

[illegible]

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC142,43	C3BBKG000044	IC	2		L18	VLQ0319K100	COIL 10UH	1	G1C100K00023
IC144	UPD65840GY07	IC	1	C1ZBZ0001393	L19	VLQ0163J470	COIL 47UH	1	
IC145	C3ZBJ0000007	IC	1		L20-22	VLQ0319K100	COIL 10UH	3	G1C100K00023
IC146	UPD83012G002	IC	1		L23	VLQ0163J470	COIL 47UH	1	
IC147,48	D4564163A10B	IC	2		L24	VLQ0163J220	COIL 22UH	1	
IC149,50	C3BBKG000044	IC	2		L25	VLQ0163J470	COIL 47UH	1	
IC151	UPD65840GY07	IC	1	C1ZBZ0001393	L26	VLQ0319K1R0	COIL 1.0UH	1	
IC152	C3ZBJ0000007	IC	1		L27	VLQ0163J2R7	COIL 2.7UH	1	G1C2R7J00002
IC153	UPD83012G002	IC	1		L28	VLQ0163JR68	COIL 0.68UH	1	G1CR68J00004
IC154,55	D4564163A10B	IC	2		L29-32	VLQ0319K1R0	COIL 1.0UH	4	
IC156,57	C3BBKG000044	IC	2		L33-35	VLQ0163J470	COIL 47UH	3	
IC158	UPD65840GY07	IC	1	C1ZBZ0001393	L36	VLP0183	COIL	1	J0JKC0000007
IC159	C3ZBJ0000007	IC	1		L37	VLQ0163J470	COIL 47UH	1	
IC160	UPD83012G002	IC	1						
IC161,62	D4564163A10B	IC	2		P1,P2	VJP3510	CONNECTOR (MALE)	2	K1KAC8B00004
IC163,64	C3BBKG000044	IC	2		P3	VJP3125B008	CONNECTOR (MALE)	1	
IC165	UPD65840GY07	IC	1	C1ZBZ0001393	P4	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006
IC166	C3ZBJ0000007	IC	1		P5	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
IC167,68	IDTLVC16374F	IC	2						
IC169-71	IDTLVC16245F	IC	3		Q1	2SB1202-S	TRANSISTOR	1	
IC172	IDTLVC16374F	IC	1		Q2,Q3	2SJ278	TRANSISTOR	2	
IC173-81	IDTLVC16245F	IC	9		Q4,Q5	XN4601	TRANSISTOR-RESISTOR	2	
IC182,83	VY06629	IC	2	C1ZBZ0000165	Q6,Q7	2SD601A-R	TRANSISTOR	2	
IC184	D4564163A10B	IC	1		Q8	2SB1202-S	TRANSISTOR	1	
IC185	C1ZBZ0001644	IC	1		Q10	2SB1202-S	TRANSISTOR	1	
IC186	IDTLVC16245F	IC	1						
IC187	LT1573CS8	IC	1		QR1,R2	UN5212	TRANSISTOR-RESISTOR	2	
IC188	D4564163A10B	IC	1						
IC189	IDTLVC16245F	IC	1		R1	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP83552A
IC190	D4564163A10B	IC	1		R1	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC191,92	C1ZBZ0001644	IC	2		R1	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	FOR VEP83575A
IC193	IDTLVC16245F	IC	1		R2	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP83552A
IC194	D4564163A10B	IC	1		R2	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC195,96	TC7W32FU	IC	2		R2	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	FOR VEP83575A
IC197	TLCX125FT	IC	1		R3	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP83552A
IC198	C0JBAB000196	IC	1		R3	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC199	IDTLVC16245F	IC	1		R3	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	FOR VEP83575A
IC200	TLCX125FT	IC	1		R6	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
IC202,03	IDTLVC16245F	IC	2		R7	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC204	XC62FP3302P	IC	1		R8	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
IC205,06	DS90LV047A	IC	2		R9	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC207	TLCX125FT	IC	1		R10-12	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
IC208	UPD82277N003	IC	1		R13	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC209	TLCX245FT	IC	1		R14-16	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
IC210-21	D4564163A10B	IC	12		R18	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC222-25	D4564441A10	IC	4		R19	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
IC226	DS90LV048A	IC	1		R22,23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
IC227	C1ZBZ0001644	IC	1		R24	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
IC228	LT1573CS8	IC	1		R25,26	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
IC229,30	IDTLVC16374F	IC	2		R27,28	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC231,32	M66282F	IC	2		R29-31	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
IC233,34	DS90CR217MTD	IC	2		R32-35	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
IC235-38	TC7SH32FU	IC	4		R36	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
IC239	TC7W00FU	IC	1		R38-42	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
IC240,41	M66282F	IC	2		R44-68	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	25	
IC242	TC7W00FU	IC	1		R69,70	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
IC243	TLCX125FT	IC	1		R71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC244	TC7W32FU	IC	1		R72-74	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
IC245-47	TLCX125FT	IC	3		R76,77	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
IC248-50	TC7W32FU	IC	3		R78	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC251	TLCX125FT	IC	1		R79-83	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
					R85	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
ID10	VVVS13624I	SOFTWARE	1		R86	ERJ3RED224	M.RESISTOR CH 1/16W 220K	1	
					R87	ERJ3RED684	M.RESISTOR CH 1/16W 680K	1	
L1	VLF1151A132	COIL	1		R88	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
L2-L4	VLP0183	COIL	3	J0JKC0000007	R89	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
L5-L7	VLF1151A132	COIL	3		R90,91	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	2	
L8,L9	VLQ0319K470	COIL 47UH	2	G1C470K00013	R92	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
L10	VLQ0319K221	COIL 220UH	1	G1C221K00010	R93	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
L11	VLQ0163J390	COIL 39UH	1		R95	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
L12	VLQ0163J680	COIL 68UH	1		R96	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
L13	VLQ0163J221	COIL 220UH	1	G1C221J00003	R97	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	1	
L14	VLP0183	COIL	1	J0JKC0000007	R98,99	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
L15	VLQ0163J470	COIL 47UH	1		R100	ERJ3RED154	M.RESISTOR CH 1/16W 150K	1	
L16,17	VLP0183	COIL	2	J0JKC0000007	R101	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R442,43	ERJ3RBD471	M.RESISTOR CH 1/16W 470	2		R626	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R444	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1		R627	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R445	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R628-30	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R446	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1		R631-42	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12	
R447	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1		R643,44	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R448,49	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2		R655	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R450,51	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2		R656-58	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R452,53	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2		R659-68	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	10	
R454	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1		R669-76	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8	
R455,56	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2		R677	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R457	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1		R678,79	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R459	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R680-83	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R460	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R684-97	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R461	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1		R698	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R462	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1		R699-07	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	9	
R463,64	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R465	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R709,10	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R466	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1		R711-14	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R467	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		R715-28	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R468	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1		R729	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R469	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		R730-34	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	5	
R470-80	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	11		R736	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R481-88	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	8		R738	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R489	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1		R739	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R490-92	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3		R740,41	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R493	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		R742-45	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R494	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R746-59	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R495,96	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		R760	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R497,98	ERJ3RED750	M.RESISTOR CH 1/16W 75	2		R761	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R499	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1		R763	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R500	ERJ3RED750	M.RESISTOR CH 1/16W 75	1		R765-67	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R501	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1		R768	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R502	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		R769	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R503	ERJ3RBD511	M.RESISTOR CH 1/16W 510	1		R770	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R504	ERJ3GEYJ750	M.RESISTOR CH 1/16W 75	1		R771,72	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R505,06	ERJ3RED750	M.RESISTOR CH 1/16W 75	2		R773-76	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R507	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1		R777-90	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R508	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1		R791	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R509	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1		R792,93	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R510	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		R794-33	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R511	ERJ3RED750	M.RESISTOR CH 1/16W 75	1		R834	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R512	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1		R835-74	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R514	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1		R875	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R515	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1		R876-15	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R516,17	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R916	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R518	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		R917-56	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R519	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1		R957	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R520	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1		R958-99	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	42	
R521	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1		R1001,02	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R522	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1		R1003-42	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R524	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1		R1043-48	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6	
R525	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1		R1049	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R526	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1		R1050	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R527	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1		R1054	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R528,29	ERJ3RBD151	M.RESISTOR CH 1/16W 150	2		R1055-57	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R530	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1		R1058,59	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2	
R531	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1		R1060,61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R532,33	ERJ3RBD151	M.RESISTOR CH 1/16W 150	2		R1062	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R534	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R1064-75	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12	
R538-41	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4		R1076	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R546	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R1077	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
R547,48	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R1078	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1	
R550	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R1079	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R551,52	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R1080	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1	
R553,54	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R1081	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1	
R555	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R1082	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1	
R556,57	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R1083	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R560-63	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4		R1084-89	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6	
R564	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		R1090	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R565-78	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	14		R1091	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R579-82	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4		R1092-01	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	10	
R583	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		R1102-07	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6	
R584	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R1108	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R586-10	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	25		R1109	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R614,15	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R1110	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6621	EEVHB1C100	E.CAPACITOR 16V 10U	1		IC2023	TE7751	IC	1	C12BZ0000156
C6623	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1		IC2025	TVHC175FT	IC	1	
C6624	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		IC2027	TVHT541FT	IC	1	
C6625	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1		IC2100	UPC4741G2	IC	1	
C6626	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2101,02	NJM4580ED	IC	2	C0ABBB000123
C6627	EEVHP1E4R7	E.CAPACITOR 25V 4.7U	1		IC2104	UPC4741G2	IC	1	
C6628	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1		IC2105	NJM2901M	IC	1	C0BBCA000008
C6629	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		IC2106	TVHC14FT	IC	1	
C6630	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1		IC2107	UPC4741G2	IC	1	
C6631	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2108	NJM2901M	IC	1	C0BBCA000008
C6632	EEVHP1E4R7	E.CAPACITOR 25V 4.7U	1		IC2109	TVHC14FT	IC	1	
C6633	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2110	UPC4741G2	IC	1	
C6635	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2111,12	NJM4580ED	IC	2	C0ABBB000123
C6636,37	EEVHB1E330P	E.CAPACITOR 25V 33U	2		IC2113	NJM2901M	IC	1	C0BBCA000008
C6638	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2114	UPC4741G2	IC	1	
C6639,40	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	2		IC2115,16	NJM4580ED	IC	2	C0ABBB000123
C6701-13	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	13		IC2300	MC74HC4052F	IC	1	C0JBAR000051
C6805-18	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	14		IC2301	THC4053FT	IC	1	
C6820-22	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3		IC2302,03	NJM4580ED	IC	2	C0ABBB000123
C6901	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1		IC2304	C0JBAZ000527	IC	1	C0JBAZ000526
C6902,03	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	2		IC2305	NJM4580ED	IC	1	C0ABBB000123
C6904-07	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4		IC2306	AD633JR	IC	1	C0ZBZ0000158
C6908	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1		IC2307	UPC4074G2	IC	1	
C6911-33	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	23		IC2308	THC4053FT	IC	1	
C6934,35	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2		IC2310	MC74HC157AF	IC	1	
C6951-53	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3		IC2311	NJM2903M	IC	1	C0BBBA000019
C6954,55	EEVHB1A330	E.CAPACITOR 10V 33U	2		IC2400,01	UPC4741G2	IC	2	
C6956	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1		IC2402-04	MC74HC4051F	IC	3	C0JBAR000049
C6963-71	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9		IC2405	SMP08FS	IC	1	
C6972	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2406,07	UPC4074G2	IC	2	
C6973-75	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3		IC2408	UPC4741G2	IC	1	
C6976	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2409	NJM4558M	IC	1	C0ABBB000044
C6977,78	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	2		IC2412	NJM4580ED	IC	1	C0ABBB000123
					IC2413	NJM4558M	IC	1	C0ABBB000044
D2001-07	LN1251CAL	DIODE	7		IC2414	AD7868AR	IC	1	C0FBZG000001
D2100-11	MA147	DIODE	12		IC2415	MC74HC4052F	IC	1	C0JBAR000051
D2300,01	MA8039-L	DIODE	2		IC2417	TVHT244FT	IC	1	
D2302,03	MA8024	DIODE	2		IC2602	TVHT541FT	IC	1	
D2304,05	MA147	DIODE	2		IC2603	SLA912SF2E	IC	1	C1AB00000872
D2306,07	MA8039-L	DIODE	2		IC2604,05	AD7840JN	IC	2	C0FABZ000009
D2308-10	MA3J14300L	DIODE	3		IC2608	UPC4741G2	IC	1	
D2311,12	MA8039-L	DIODE	2		IC2609	THC4053FT	IC	1	
D2400-03	MA8024	DIODE	4		IC2702	LVX3245QSC	IC	1	
D2900-13	MA704A	DIODE	14		IC2703,04	C0JBAZ001544	IC	2	
D6001	MA3J14300L	DIODE	1		IC2705,06	TC7W53F	IC	2	
D6071,72	MA3J14300L	DIODE	2		IC2801	0P177FS	IC	1	
D6301-08	MA3J14300L	DIODE	8		IC2802	AD8842AR	IC	1	
D6401-04	MA3J14300L	DIODE	4		IC2803-05	UPC4741G2	IC	3	
D6501,02	MA3J14300L	DIODE	2		IC2806	NJM4558M	IC	1	C0ABBB000044
D6503	LN1251CAL	DIODE	1		IC2807	TC4W53F	IC	1	C0JBAR000225
D6600-05	MA3J14300L	DIODE	6		IC2851	0P177FS	IC	1	
D6951	MA704A	DIODE	1		IC2852	AD8842AR	IC	1	
					IC2853-55	UPC4741G2	IC	3	
DL2600	VLD0256	DELAY LINE	1		IC2857	TC4W53F	IC	1	C0JBAR000225
FL2900-04	VLFO576	FILTER	5	J0HACH000011	IC2900-05	NJM78L12UA	IC	6	C0CBAK000001
					IC2906-09	NJM79L12UA	IC	4	
IC2001	MC68332CFC16	IC	1	C2GBC0000060	IC2910,11	XC62FP5002P	IC	2	
IC2002	VSI3437H	IC	1		IC2912,13	XC62DN5002P	IC	2	
IC2003	TVHC02FT	IC	1		IC6001	TL7705CPSB	IC	1	C0EBS0000002
IC2004	TVHC74FT	IC	1		IC6002	VSI3441H	IC	1	
IC2005	C0JBAZ000527	IC	1	C0JBAZ000526	IC6004	STK1744-D45I	IC	1	
IC2007	TVHC74FT	IC	1		IC6005	HD64180ZRP10	IC	1	C2GAA0000024
IC2008	TVHC08FT	IC	1		IC6006	TC74HC4040AF	IC	1	C0JBAK000098
IC2009	TC74HC4050AF	IC	1		IC6007,08	T74VHC541F	IC	2	
IC2010	TVHC86FT	IC	1		IC6009	TC74HC4050AF	IC	1	
IC2011,12	Y7C18525SC	IC	2		IC6010	74F32SJ	IC	1	
IC2013	IDT71321L55F	IC	1	C3HBCC000002	IC6011	TVHC00FT	IC	1	
IC2014	TVHC175FT	IC	1		IC6012	TVHC08FT	IC	1	
IC2015	TVHC164FT	IC	1		IC6013-15	TVHC138FT	IC	3	
IC2016	TVHC273FT	IC	1		IC6016	LC35256FM70U	IC	1	
IC2017	TVHC74FT	IC	1		IC6017	S80727ANDQ	IC	1	
IC2018	TVHC08FT	IC	1		IC6072	TVHC14FT	IC	1	
IC2019	SLA909SF1G	IC	1	C1AB00000871	IC6073,74	TVHC74FT	IC	2	
IC2022	TVHC244FT	IC	1		IC6075	TC74HC4050AF	IC	1	
					IC6076	TVHC161FT	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	XYN3+F12S	SCREW	1		C267	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	XYN3+F14S	SCREW	7		C268,69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
					C270	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
					C271	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
					C272,73	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
					C274	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
					C275	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
■ E9	VEP85198A	EQ P.C.BOARD	1 (RTL)		C276	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
					C279	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
					C280-83	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C1,C2	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C284	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C3	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C286	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4-C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		C287	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C7	EEUFC1A681	E.CAPACITOR 10V 680U	1		C288	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C8	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C289	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C9	EEUFC1A681	E.CAPACITOR 10V 680U	1		C290	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C10-14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	5		C291	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C15	EEUFC1A681	E.CAPACITOR 10V 680U	1		C292	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C16	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C293	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C17	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C294	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C18	EEUFC1A681	E.CAPACITOR 10V 680U	1		C295	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C19	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C296,97	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C20,21	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C298,99	ECST1CC336Z	T.CAPACITOR CH 16V 33U	2	
C22	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C300	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C101	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1		C301	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C102,03	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C302	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	1	
C105	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C303	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C107,08	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C304,05	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C110-13	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4		C306	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C114-21	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	8		C307,08	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C122-37	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	16		C309	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C200,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C310,11	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C202	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C312	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C203	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		C313,14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C204	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C315	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C205	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		C400,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C206,07	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2		C402	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C208,09	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C403	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C210	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1		C404	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C211	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C405	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C212	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C406,07	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C213,14	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2		C408,09	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C215	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C410	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C216	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1		C411	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C217	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C412	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C218	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C413,14	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2	
C219	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C415	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C220	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C416	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
C222	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C417	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C224	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C418	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C225	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C419	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C226	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C420	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C227	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C422	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C229	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1		C424	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C230	ECUX1H104KBV	C.CAPACITOR CH 50V 0.1U	1		C425	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C233	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		C426	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C234-36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3		C427	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C237	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1		C429	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C238	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1		C430	ECUX1H104KBV	C.CAPACITOR CH 50V 0.1U	1	
C239,40	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C433	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C241	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		C434-36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C243	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C437	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C244	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1		C438	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C245-49	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	5		C439,40	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C250	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		C441	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C251-53	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	3		C443	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C254	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C444	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1	
C255,56	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2		C445-49	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	5	
C257	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		C450	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C259	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C451-53	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	3	
C260	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C454	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C262	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1		C455,56	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2	
C263	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		C457	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C264,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C459	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C266	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1		C460	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C845-49	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	5		DL601	VLD0277C400	DELAY	1	
C850	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		DL800	J1AEB0000005	DELAY LINE	1	
C851-53	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	3		DL801	VLD0277C400	DELAY	1	
C854	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1						
C855,56	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2		FL200	T689BD-0350	FILTER	1	
C857	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		FL400	T689BD-0350	FILTER	1	
C859	ECUX1H103KBV	C.CAPACITOR CH 16V 0.01U	1		FL600	T689BD-0350	FILTER	1	
C860	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		FL800	T689BD-0350	FILTER	1	
C862	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1						
C863	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		IC1	LM337T	IC	1	C0CABYG00002
C864,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC4,C5	THC4053FT	IC	2	
C866	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1		IC6	NJM78L06UA	IC	1	
C867	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		IC7	NJM79L06UA	IC	1	
C868,69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC8	LM2990S-5.0	IC	1	
C870	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		IC9	LM2940S-5.0	IC	1	
C871	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC101	M62370GP	IC	1	C0FBBD000082
C872,73	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2		IC102	SN104200DB	IC	1	
C874	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC103-08	THC4053FT	IC	6	
C875	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		IC109-13	NJM064V	IC	5	
C876	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1		IC200,01	AD8005ART	IC	2	
C879	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1		IC202-04	MC1495D	IC	3	
C880-83	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4		IC205	UPC2726T	IC	1	
C884	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1		IC206	MC10EL16D	IC	1	C0JBZZ000015
C886	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC207	MC10EL52D	IC	1	C0JBZF000002
C887	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1		IC208	MC10H107M	IC	1	
C888	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		IC209	MC10H116M	IC	1	C0JBZZ000018
C889	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC210	AD8005ART	IC	1	
C890	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		IC211	NJM062V	IC	1	
C891	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		IC400,01	AD8005ART	IC	2	
C892	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC402-04	MC1495D	IC	3	
C893	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC405	UPC2726T	IC	1	
C894	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC406	MC10EL16D	IC	1	C0JBZZ000015
C895	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		IC407	MC10EL52D	IC	1	C0JBZF000002
C896,97	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC408	MC10H107M	IC	1	
C898,99	ECST1CC336Z	T.CAPACITOR CH 16V 33U	2		IC409	MC10H116M	IC	1	C0JBZZ000018
C900	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1		IC410	AD8005ART	IC	1	
C901	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1		IC411	NJM062V	IC	1	
C902	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	1		IC600,01	AD8005ART	IC	2	
C903	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC602-04	MC1495D	IC	3	
C904,05	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2		IC605	UPC2726T	IC	1	
C906	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1		IC606	MC10EL16D	IC	1	C0JBZZ000015
C907,08	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		IC607	MC10EL52D	IC	1	C0JBZF000002
C909	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		IC608	MC10H107M	IC	1	
C910,11	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		IC609	MC10H116M	IC	1	C0JBZZ000018
C912	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1		IC610	AD8005ART	IC	1	
C913,14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		IC611	NJM062V	IC	1	
C915	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC800,01	AD8005ART	IC	2	
					IC802-04	MC1495D	IC	3	
D2-D4	MA142WA	DIODE	3		IC805	UPC2726T	IC	1	
D200,01	MA367	DIODE	2		IC806	MC10EL16D	IC	1	C0JBZZ000015
D202	MA3J14300L	DIODE	1		IC807	MC10EL52D	IC	1	C0JBZF000002
D203	HSMS-2824	DIODE	1		IC808	MC10H107M	IC	1	
D204	HSMS-2823	DIODE	1		IC809	MC10H116M	IC	1	C0JBZZ000018
D205	MA357	DIODE	1		IC810	AD8005ART	IC	1	
D400,01	MA367	DIODE	2		IC811	NJM062V	IC	1	
D402	MA3J14300L	DIODE	1						
D403	HSMS-2824	DIODE	1		L1	VLF1151A132	COIL	1	
D404	HSMS-2823	DIODE	1		L200	ELJNAR47JF	COIL 0.47UH	1	
D405	MA357	DIODE	1		L201,02	VLF1151A132	COIL	2	
D600,01	MA367	DIODE	2		L203	VLQ0875A68NJ	COIL 0.68UH	1	
D602	MA3J14300L	DIODE	1		L204	ELJNA1R0JF	COIL 1UH	1	
D603	HSMS-2824	DIODE	1		L205,06	VLQ0875AR22J	COIL 0.22UH	2	
D604	HSMS-2823	DIODE	1		L207-18	VLQ0771R15K	COIL 0.15UH	12	
D605	MA357	DIODE	1		L219,20	VLF1151A132	COIL	2	
D800,01	MA367	DIODE	2		L221,22	ELJNAR82JF	COIL 0.82UH	2	
D802	MA3J14300L	DIODE	1		L223	ELJNA1R0JF	COIL 1UH	1	
D803	HSMS-2824	DIODE	1		L224,25	VLF1151A132	COIL	2	
D804	HSMS-2823	DIODE	1		L226	VLQ0629	COIL	1	G2AR18C00003
D805	MA357	DIODE	1		L227	VLQ0875AR15J	COIL 0.15UH	1	
					L228	VLQ0875A68NJ	COIL 0.68UH	1	
DL200	J1AEB0000005	DELAY LINE	1		L400	ELJNAR47JF	COIL 0.47UH	1	
DL201	VLD0277C400	DELAY	1		L401,02	VLF1151A132	COIL	2	
DL400	J1AEB0000005	DELAY LINE	1		L403	VLQ0875A68NJ	COIL 0.68UH	1	
DL401	VLD0277C400	DELAY	1		L404	ELJNA1R0JF	COIL 1UH	1	
DL600	J1AEB0000005	DELAY LINE	1		L405,06	VLQ0875AR22J	COIL 0.22UH	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R288	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R381	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R289	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R382,83	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R290	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R384	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R291	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1		R385	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R292	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R386	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R293	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		R387	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R294	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R388	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R295	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R389	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R296	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R390	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R297	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R391	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R298	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R392	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R299	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R393	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R300	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R394,95	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R301,02	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		R396	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R303	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R397	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R304	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1		R398	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R306	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1		R399	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R307	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R400	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R308	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R401,02	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R309	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R403	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R310	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R404	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R311,12	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R405	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R313	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1		R406,07	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R314	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		R408	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R315	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R409	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R316	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R410	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R317	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R411	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R318	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1		R412	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R319	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1		R413	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R320,21	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R414	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R322	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1		R415	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R323	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		R416,17	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R324	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R418	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R325	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R419	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R326	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1		R420	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R327	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R421	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R328	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R422,23	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R329	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R424	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R330	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1		R425	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R331,32	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2		R426	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R333	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R427	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R334	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R428	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R335	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R429	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R336	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1		R430	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R337	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1		R431	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R338	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R432	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R339	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1		R433	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R340,41	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R434,35	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R342	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1		R436	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R343,44	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		R437	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R345,46	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2		R438,39	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R347	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R440	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R348	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	1		R441	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R349	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R442,43	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R350,51	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		R444	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R352-55	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4		R445	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R356	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1		R446	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R357	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R447	ERJ3RBD151	M.RESISTOR CH 1/16W 150	1	
R358	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1		R449	ERJ3RED300	M.RESISTOR CH 1/16W 30	1	
R359	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R450	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R360	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R451	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R361	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R453	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R362	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R454	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R363,64	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2		R455	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R365	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1		R456,57	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R366	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R458	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R367	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R459	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R368	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1		R460	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R369	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R461	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R370	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1		R462	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R371	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R463	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R372,73	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		R464,65	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R374	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R466	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R375,76	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		R467	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R377,78	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2		R468	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	

[illegible]

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4117	NJM78L12UA	IC	1	C0CBAKC00001					
IC4118	NJM79L12UA	IC	1		IP4801	EPC2TC32	IC	1	
IC4119	NJM78L12UA	IC	1	C0CBAKC00001					
IC4120	NJM79L12UA	IC	1		L4001-07	VLQEL06F470K	COIL 47UH	7	G0C470K00005
IC4121	MC74HC4052F	IC	1	C0JBAR000051	L4901	VLF1151A132	COIL	1	
IC4122	NJM4558M-D	IC	1		L4902	VLP0183	COIL	1	J0JKC0000007
IC4123	XC62FP5002P	IC	1						
IC4124	XC62DN5002P	IC	1		P1,P2	VJP3454B096	CONNECTOR (MALE)	2	K1KA96B00021
IC4125	MC74HC4052F	IC	1	C0JBAR000051	P4001	VJP1230T	CONNECTOR (MALE) 3P	1	
IC4201	MC74HC4052F	IC	1	C0JBAR000051	P4002	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197
IC4202	NJM4580ED	IC	1	C0ABBB000123	P4003	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198
IC4203	NJM2043MD	IC	1	C0ABBB000029	P4004	VJP1230T	CONNECTOR (MALE) 3P	1	
IC4204	NJM78L12UA	IC	1	C0CBAKC00001	P4101	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197
IC4205,06	AQV212SX	IC	2		P4801	VJP3125B008	CONNECTOR (MALE)	1	
IC4207	NJM79L12UA	IC	1						
IC4208	XC62FP5002P	IC	1		Q4001	2SD602A-R	TRANSISTOR	1	
IC4209	NJM2100MD	IC	1		Q4002	2SC1847-R	TRANSISTOR	1	
IC4210	AK4503VF	IC	1		Q4003,04	2SB710A	TRANSISTOR	2	
IC4211	NJM4558M-D	IC	1		Q4005	2SD602A-R	TRANSISTOR	1	
IC4301	NJM4558M-D	IC	1		Q4006-09	2SD1994A-R	TRANSISTOR	4	
IC4302	MC74HC4053F	IC	1	C0JBAR000054	Q4010-12	2SD602A-R	TRANSISTOR	3	
IC4303,04	BA301	IC	2		Q4013,14	2SB710A	TRANSISTOR	2	
IC4305-08	LM318PS	IC	4		Q4015,16	2SD602A-R	TRANSISTOR	2	
IC4309	NJM78L12UA	IC	1	C0CBAKC00001	Q4017-23	2SB710A	TRANSISTOR	7	
IC4310	NJM79L12UA	IC	1		Q4024-27	2SD602A-R	TRANSISTOR	4	
IC4401	MB621926	IC	1		Q4028-35	2SD1994A-R	TRANSISTOR	8	
IC4402	MSM514800C7J	IC	1		Q4036-41	2SD1328	TRANSISTOR	6	
IC4403	XC62FP5002P	IC	1		Q4101	2SB710A	TRANSISTOR	1	
IC4404	MC74HC4053F	IC	1	C0JBAR000054	Q4102	2SD602A-R	TRANSISTOR	1	
IC4405,06	NJM2100MD	IC	2		Q4103	2SB710A	TRANSISTOR	1	
IC4407,08	NJM4558M-D	IC	2		Q4104,05	2SD602A-R	TRANSISTOR	2	
IC4409	AK4503VF	IC	1		Q4106	2SB792-R	TRANSISTOR	1	
IC4501-03	NJM4558M-D	IC	3		Q4107,08	2SD1149-R	TRANSISTOR	2	
IC4504-06	NJM2903M	IC	3	C0BBBA000019	Q4109,10	2SD602A-R	TRANSISTOR	2	
IC4507	NJM78L12UA	IC	1	C0CBAKC00001	Q4201	2SD1328	TRANSISTOR	1	
IC4508	NJM79L12UA	IC	1		Q4202	2SD1994A-R	TRANSISTOR	1	
IC4605	XC62FP5002P	IC	1		Q4203	2SB1322A-R	TRANSISTOR	1	
IC4606	AK4393VF	IC	1	C0FBBK000013	Q4204	2SD1994A-R	TRANSISTOR	1	
IC4607	NJM2043MD	IC	1	C0ABBB000029	Q4205	2SB1322A-R	TRANSISTOR	1	
IC4608	NJM4580ED	IC	1	C0ABBB000123	Q4301	2SB710A	TRANSISTOR	1	
IC4609	MC74HC4052F	IC	1	C0JBAR000051	Q4302	2SD602A-R	TRANSISTOR	1	
IC4610	NJM4580ED	IC	1	C0ABBB000123	Q4303,04	2SD1149-R	TRANSISTOR	2	
IC4611	AD7945BR	IC	1		Q4305	2SB792-R	TRANSISTOR	1	
IC4612	NJM4580ED	IC	1	C0ABBB000123	Q4306,07	2SD602A-R	TRANSISTOR	2	
IC4614	M5203FP	IC	1	C0ABBB000166	Q4501-05	2SD602A-R	TRANSISTOR	5	
IC4615	NJM2043MD	IC	1	C0ABBB000029	Q4601,02	2SD1328	TRANSISTOR	2	
IC4616	NJM4580ED	IC	1	C0ABBB000123	Q4701	2SB710A	TRANSISTOR	1	
IC4617	MC74HC4052F	IC	1	C0JBAR000051	Q4703,04	2SB710A	TRANSISTOR	2	
IC4618,19	NJM4580ED	IC	2	C0ABBB000123	Q4705	2SD1994A-R	TRANSISTOR	1	
IC4620	M5203FP	IC	1	C0ABBB000166	Q4706	2SB1322A-R	TRANSISTOR	1	
IC4621	AD7945BR	IC	1		Q4707	2SD1994A-R	TRANSISTOR	1	
IC4701	MC74HC4052F	IC	1	C0JBAR000051	Q4708	2SB1322A-R	TRANSISTOR	1	
IC4702	NJM4580ED	IC	1	C0ABBB000123	Q4709	2SD1994A-R	TRANSISTOR	1	
IC4703	NJM2043MD	IC	1	C0ABBB000029	Q4710	2SB1322A-R	TRANSISTOR	1	
IC4704	NJM78L12UA	IC	1	C0CBAKC00001	Q4711	2SD1994A-R	TRANSISTOR	1	
IC4705,06	AQV212SX	IC	2		Q4712	2SB1322A-R	TRANSISTOR	1	
IC4707	NJM79L12UA	IC	1		Q4713,14	2SD1328	TRANSISTOR	2	
IC4708	MC74HC4052F	IC	1	C0JBAR000051	Q4717,18	2SD1328	TRANSISTOR	2	
IC4709	NJM4580ED	IC	1	C0ABBB000123					
IC4710	NJM2043MD	IC	1	C0ABBB000029	QR4002-04	UN2213	TRANSISTOR-RESISTOR	3	
IC4711	NJM78L12UA	IC	1	C0CBAKC00001	QR4101	UN2113	TRANSISTOR-RESISTOR	1	
IC4712,13	AQV212SX	IC	2		QR4102	UN221F	TRANSISTOR-RESISTOR	1	
IC4714	NJM79L12UA	IC	1		QR4103	UN2213	TRANSISTOR-RESISTOR	1	
IC4715	YWNJM4556AM	IC	1		QR4104	UN2113	TRANSISTOR-RESISTOR	1	
IC4801	EPF10K30A143	IC	1	C3ZBB0000007	QR4105	UN221F	TRANSISTOR-RESISTOR	1	
IC4802	TLCX245FT	IC	1		QR4106-13	UN2213	TRANSISTOR-RESISTOR	8	
IC4803	TVHC244FT	IC	1		QR4201	UN2213	TRANSISTOR-RESISTOR	1	
IC4804	C0EBE0000073	IC	1		QR4202	UN2113	TRANSISTOR-RESISTOR	1	
IC4805	TLCX245FT	IC	1		QR4301-03	UN2213	TRANSISTOR-RESISTOR	3	
IC4806	SN74S1053NS	IC	1		QR4601,02	UN2213	TRANSISTOR-RESISTOR	2	
IC4807	TLCX245FT	IC	1		QR4603,04	UN2113	TRANSISTOR-RESISTOR	2	
IC4808-10	TVHC244FT	IC	3		QR4605-08	UN2213	TRANSISTOR-RESISTOR	4	
IC4811-19	TVHT244FT	IC	9		QR4701,02	UN2213	TRANSISTOR-RESISTOR	2	
					QR4703	UN2113	TRANSISTOR-RESISTOR	1	
ID10	VVVS13461	SOFTWARE	1		QR4704	UN2213	TRANSISTOR-RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TP4601-04	EYF6CU	TEST POINT	4		C4117	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
					C4118	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
VR4001,02	VRV0113B104	V.RESISTOR 100K	2		C4119	EEVHB1C220	E.CAPACITOR 16V 22U	1	
VR4101,02	VRV0113B103	V.RESISTOR 10K	2		C4120	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
VR4103	VRV0113B101	V.RESISTOR 100	1		C4121	EEVHB1C220	E.CAPACITOR 16V 22U	1	
VR4104,05	VRV0113B103	V.RESISTOR 10K	2		C4122	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
VR4107	VRV0113B103	V.RESISTOR 10K	1		C4124	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	
VR4108	VRV0113B502	V.RESISTOR 5K	1	D3EC45020002	C4145,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
VR4109	VRV0113B501	V.RESISTOR 500	1		C4147	EEVHB1C470	E.CAPACITOR 16V 47U	1	
VR4110	VRV0113B202	V.RESISTOR 2K	1		C4148,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
VR4111	VRV0113B502	V.RESISTOR 5K	1	D3EC45020002	C4150	EEVHB1C470	E.CAPACITOR 16V 47U	1	
VR4112	VRV0113B202	V.RESISTOR 2K	1		C4171,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
VR4113	VRV0113B103	V.RESISTOR 10K	1		C4201,02	ECA1HHG330	E.CAPACITOR 50V 33U	2	
VR4201	VRV0113B501	V.RESISTOR 500	1		C4203,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
VR4301	VRV0113B103	V.RESISTOR 10K	1		C4205	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
VR4601,02	VRV0113B103	V.RESISTOR 10K	2		C4206	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
VR4701,02	VRV0113B501	V.RESISTOR 500	2		C4208	EEVHP1C100	E.CAPACITOR 16V 10U	1	
					C4211,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
		MISCELLANEOUS			C4213	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
					C4214	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
	VML2143	CARD PULLER	1		C4215	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1	
	VML2144	CARD PULLER	1		C4216	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
					C4217	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
					C4218	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
					C4219	EEVHB1C220	E.CAPACITOR 16V 22U	1	
					C4220	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
					C4221	EEVHB1C220	E.CAPACITOR 16V 22U	1	
■ E11	VEP84352A	A AD/DA P.C.BOARD	1 (RTL)		C4222	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
					C4224	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	
					C4226,27	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C4001,02	ECA1HHG330	E.CAPACITOR 50V 33U	2		C4228,29	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4003,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2		C4230	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C4005	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C4231	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4006	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C4232,33	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4008	EEVHP1C100	E.CAPACITOR 16V 10U	1		C4234	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4011,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C4235	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C4013	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C4236,37	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4014	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1		C4238	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4015	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1		C4245,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4016	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1		C4247	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4017	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C4248,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4018	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4250	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4019	EEVHB1C220	E.CAPACITOR 16V 22U	1		C4271,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4020	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1		C4301,02	ECA1HHG330	E.CAPACITOR 50V 33U	2	
C4021	EEVHB1C220	E.CAPACITOR 16V 22U	1		C4303,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C4022	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1		C4305	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C4024	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1		C4306	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4026,27	EEVHB1C100	E.CAPACITOR 16V 10U	2		C4308	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C4028,29	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4311,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4030	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1		C4313	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4031	EEVHB1C100	E.CAPACITOR 16V 10U	1		C4314	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C4032,33	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4315	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1	
C4034	EEVHB1C100	E.CAPACITOR 16V 10U	1		C4316	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C4035	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1		C4317	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4036,37	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4318	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4038	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4319	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4039,40	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4320	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4041	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4321	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4042,43	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4322	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4044	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4324	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	
C4045,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4345,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4047	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4347	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4048,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4348,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4050	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4350	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4071,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4371,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4101,02	ECA1HHG330	E.CAPACITOR 50V 33U	2		C4401	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4103,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2		C4402	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4105	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C4403	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4106	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C4405,06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4108	EEVHP1C100	E.CAPACITOR 16V 10U	1		C4407	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4111,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C4408,09	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4113	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C4410	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4114	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1		C4411	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4115	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1		C4412-14	EEVHB1C100	E.CAPACITOR 16V 10U	3	
C4116	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1		C4415,16	EEVHB0J101	E.CAPACITOR 6.3V 100U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4209	NJM2043MD	IC	1	C0ABBB000029	L4001	VLQ0576	COIL	1	
IC4210	AK5393VS	IC	1	C0FBAK000001	L4201	VLQ0576	COIL	1	
IC4211	XC62FP5002P	IC	1		L4901	VLF1151A132	COIL	1	
IC4214	NJM78L12UA	IC	1	C0CBAKC00001	L4902	VLP0183	COIL	1	J0JKC0000007
IC4215	NJM79L12UA	IC	1						
IC4301	NJM2043MD	IC	1	C0ABBB000029	P4001,02	VJP3454B096	CONNECTOR (MALE)	2	K1KA96B00021
IC4302	MC74HC4052F	IC	1	C0JBAR000051	P4801	VJP3125B008	CONNECTOR (MALE)	1	
IC4303	NJM4580ED	IC	1	C0ABBB000123					
IC4304	AD7945BR	IC	1		Q4401	2SD1328	TRANSISTOR	1	
IC4305	NJM4580ED	IC	1	C0ABBB000123	Q4402	2SD1994A-R	TRANSISTOR	1	
IC4306	MC74HC4052F	IC	1	C0JBAR000051	Q4403	2SB1322A-R	TRANSISTOR	1	
IC4307,08	NJM4580ED	IC	2	C0ABBB000123	Q4404	2SD1994A-R	TRANSISTOR	1	
IC4309	NJM2043MD	IC	1	C0ABBB000029	Q4405	2SB1322A-R	TRANSISTOR	1	
IC4314	NJM78L12UA	IC	1	C0CBAKC00001	Q4408	2SD1328	TRANSISTOR	1	
IC4315	NJM79L12UA	IC	1		Q4501	2SD1328	TRANSISTOR	1	
IC4401	XC62FP5002P	IC	1		Q4502	2SD1994A-R	TRANSISTOR	1	
IC4403	AK4393VF	IC	1	C0FBBK000013	Q4503	2SB1322A-R	TRANSISTOR	1	
IC4404	NJM2043MD	IC	1	C0ABBB000029	Q4504	2SD1994A-R	TRANSISTOR	1	
IC4405	NJM4580ED	IC	1	C0ABBB000123	Q4505	2SB1322A-R	TRANSISTOR	1	
IC4406	MC74HC4052F	IC	1	C0JBAR000051	Q4508	2SD1328	TRANSISTOR	1	
IC4407	NJM4580ED	IC	1	C0ABBB000123	Q4601	2SD1328	TRANSISTOR	1	
IC4408	MC74HC4052F	IC	1	C0JBAR000051	Q4602	2SD1994A-R	TRANSISTOR	1	
IC4409	NJM4580ED	IC	1	C0ABBB000123	Q4603	2SB1322A-R	TRANSISTOR	1	
IC4410	NJM2043MD	IC	1	C0ABBB000029	Q4604	2SD1994A-R	TRANSISTOR	1	
IC4411,12	AQV212SX	IC	2		Q4605	2SB1322A-R	TRANSISTOR	1	
IC4413	NJM78L12UA	IC	1	C0CBAKC00001	Q4608	2SD1328	TRANSISTOR	1	
IC4414	NJM79L12UA	IC	1		Q4701	2SD1328	TRANSISTOR	1	
IC4415	XC62FP5002P	IC	1		Q4702	2SD1994A-R	TRANSISTOR	1	
IC4416	XC62DN5002P	IC	1		Q4703	2SB1322A-R	TRANSISTOR	1	
IC4504	NJM2043MD	IC	1	C0ABBB000029	Q4704	2SD1994A-R	TRANSISTOR	1	
IC4505	NJM4580ED	IC	1	C0ABBB000123	Q4705	2SB1322A-R	TRANSISTOR	1	
IC4506	MC74HC4052F	IC	1	C0JBAR000051	Q4708	2SD1328	TRANSISTOR	1	
IC4507	NJM4580ED	IC	1	C0ABBB000123	Q4801,02	2SB710A	TRANSISTOR	2	
IC4508	MC74HC4052F	IC	1	C0JBAR000051					
IC4509	NJM4580ED	IC	1	C0ABBB000123	QR4003	UN2113	TRANSISTOR-RESISTOR	1	
IC4510	NJM2043MD	IC	1	C0ABBB000029	QR4004	UN221F	TRANSISTOR-RESISTOR	1	
IC4511,12	AQV212SX	IC	2		QR4005	UN2113	TRANSISTOR-RESISTOR	1	
IC4513	NJM78L12UA	IC	1	C0CBAKC00001	QR4006	UN221F	TRANSISTOR-RESISTOR	1	
IC4514	NJM79L12UA	IC	1		QR4103	UN2113	TRANSISTOR-RESISTOR	1	
IC4601	XC62FP5002P	IC	1		QR4104	UN221F	TRANSISTOR-RESISTOR	1	
IC4603	AK4393VF	IC	1	C0FBBK000013	QR4105	UN2113	TRANSISTOR-RESISTOR	1	
IC4604	NJM2043MD	IC	1	C0ABBB000029	QR4106	UN221F	TRANSISTOR-RESISTOR	1	
IC4605	NJM4580ED	IC	1	C0ABBB000123	QR4203	UN2113	TRANSISTOR-RESISTOR	1	
IC4606	MC74HC4052F	IC	1	C0JBAR000051	QR4204	UN221F	TRANSISTOR-RESISTOR	1	
IC4607	NJM4580ED	IC	1	C0ABBB000123	QR4205	UN2113	TRANSISTOR-RESISTOR	1	
IC4608	MC74HC4052F	IC	1	C0JBAR000051	QR4206	UN221F	TRANSISTOR-RESISTOR	1	
IC4609	NJM4580ED	IC	1	C0ABBB000123	QR4303	UN2113	TRANSISTOR-RESISTOR	1	
IC4610	NJM2043MD	IC	1	C0ABBB000029	QR4304	UN221F	TRANSISTOR-RESISTOR	1	
IC4611,12	AQV212SX	IC	2		QR4305	UN2113	TRANSISTOR-RESISTOR	1	
IC4613	NJM78L12UA	IC	1	C0CBAKC00001	QR4306	UN221F	TRANSISTOR-RESISTOR	1	
IC4614	NJM79L12UA	IC	1		QR4401	UN2213	TRANSISTOR-RESISTOR	1	
IC4704	NJM2043MD	IC	1	C0ABBB000029	QR4402	UN2113	TRANSISTOR-RESISTOR	1	
IC4705	NJM4580ED	IC	1	C0ABBB000123	QR4403	UN2213	TRANSISTOR-RESISTOR	1	
IC4706	MC74HC4052F	IC	1	C0JBAR000051	QR4404	UN2113	TRANSISTOR-RESISTOR	1	
IC4707	NJM4580ED	IC	1	C0ABBB000123	QR4501	UN2213	TRANSISTOR-RESISTOR	1	
IC4708	MC74HC4052F	IC	1	C0JBAR000051	QR4502	UN2113	TRANSISTOR-RESISTOR	1	
IC4709	NJM4580ED	IC	1	C0ABBB000123	QR4503	UN2213	TRANSISTOR-RESISTOR	1	
IC4710	NJM2043MD	IC	1	C0ABBB000029	QR4504	UN2113	TRANSISTOR-RESISTOR	1	
IC4711,12	AQV212SX	IC	2		QR4601	UN2213	TRANSISTOR-RESISTOR	1	
IC4713	NJM78L12UA	IC	1	C0CBAKC00001	QR4602	UN2113	TRANSISTOR-RESISTOR	1	
IC4714	NJM79L12UA	IC	1		QR4603	UN2213	TRANSISTOR-RESISTOR	1	
IC4801	EPF10K30A143	IC	1	C3ZBB0000007	QR4604	UN2113	TRANSISTOR-RESISTOR	1	
IC4802	SN74S1053NS	IC	1		QR4701	UN2213	TRANSISTOR-RESISTOR	1	
IC4803	TLCX245FT	IC	1		QR4702	UN2113	TRANSISTOR-RESISTOR	1	
IC4804	TVHC244FT	IC	1		QR4703	UN2213	TRANSISTOR-RESISTOR	1	
IC4805,06	TLCX245FT	IC	2		QR4704	UN2113	TRANSISTOR-RESISTOR	1	
IC4807	TVHT244FT	IC	1		QR4801,02	UN2213	TRANSISTOR-RESISTOR	2	
IC4808-10	TVHC244FT	IC	3						
IC4811-16	TVHT244FT	IC	6		R4001	ERJ12YJ621	M.RESISTOR CH 1/2W 620	1	
IC4817	C0EBE0000073	IC	1		R4002	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1	
					R4003,04	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	2	
ID10	VVVS13462	SOFTWARE	1		R4005,06	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	2	
					R4007	ERJ6RBD202	M.RESISTOR CH 1/10W 2K	1	
IP4801	EPC2TC32	IC	1		R4008	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1	
					R4009	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC49	TLCX244FT	IC	1		Q1001	2SB709A-R	TRANSISTOR	1	
IC50-52	TLCX245FT	IC	3		Q1002,03	TM3111	TRANSISTOR	2	B1DFED000008
IC53	EPF10K30E203	IC	1		Q1004	2SB1202-S	TRANSISTOR	1	
IC54	TLCX245FT	IC	1						
IC55	TLCX125FT	IC	1		QR1-R4	UN5214	TRANSISTOR-RESISTOR	4	
IC56	EPC2TC32	IC	1						
IC57	C0EBE0000073	IC	1		R1	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC58	UPD65943G028	IC	1		R6	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC60	TLCX245FT	IC	1		R7-15	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	9	
IC61-63	TLCX574FT	IC	3		R20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC64,65	TLCX245FT	IC	2		R33	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
IC66	TVHC244FT	IC	1		R34	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC67,68	GS9023-CFY	IC	2		R35-39	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
IC69-75	TLCX574FT	IC	7		R42-44	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
IC76,77	TLCX245FT	IC	2		R46	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
IC78,79	TLCX574FT	IC	2		R48	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
IC80-82	M66282F	IC	3		R49,50	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2	
IC83	TLCX245FT	IC	1		R51	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC84	MB90098A-107	IC	1		R52	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
IC85	DS92LV1212TM	IC	1		R53,54	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC86	C1ZBZ0001645	IC	1		R57	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC87-90	M66282F	IC	4		R59,60	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
IC91,92	GS9032-CVM	IC	2		R61	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
IC93	GS9021-CFU	IC	1	C1AB00000959	R65	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC94	GS9032-CVM	IC	1		R67	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC95,96	ADV7171KS	IC	2	C0ZBZ0000175	R68	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC97	NE521D	IC	1	C0BBBB000013	R69	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC98	AD8184AR	IC	1		R70	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC99	AD8056AR	IC	1	C0ABBB000156	R71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC100	VLF1482	FILTER	1	J0E7004A0006	R72	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC101	ADV7171KS	IC	1	C0ZBZ0000175	R73-75	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
IC102	AD8184AR	IC	1		R76	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC104	AD8056AR	IC	1	C0ABBB000156	R77-81	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
IC105	VLF1482	FILTER	1	J0E7004A0006	R84	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
IC1001	LT1170CQ	IC	1		R86	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC1002	SB3032P	IC	1	C0DBEZ000004	R87	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC1003	LT1086CM33	IC	1		R88	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC1004	LT1529CQ	IC	1		R90-92	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
IC1005	LT1573CS8	IC	1		R94-96	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
IC1006	LT1175CS8	IC	1		R97	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R98	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
ID10	VVVS13595B	SOFTWARE	1		R99	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
ID20	VVVS13596E	SOFTWARE	1		R100,01	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
					R102-21	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	20	
J1-J3	VJP4131	CONNECTOR (MALE)	3	K1QZB1AD0003	R122	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R123	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L4-L7	VLQ0319K100	COIL 10UH	4	G1C100K00023	R124-35	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12	
L17-21	VLQ0319K100	COIL 10UH	5	G1C100K00023	R136	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L22,23	VLQ0426J010	COIL 1UH	2		R137	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L24	VLQ0319K100	COIL 10UH	1	G1C100K00023	R138	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L25	VLQ0426J010	COIL 1UH	1		R139	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L26-28	VLQ0319K100	COIL 10UH	3	G1C100K00023	R140	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L29	VLQ0163J2R7	COIL 2.7UH	1	G1C2R7J00002	R141	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L30-32	VLQ0319K100	COIL 10UH	3	G1C100K00023	R142	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L35-37	VLQ0319K100	COIL 10UH	3	G1C100K00023	R143	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L38	VLQ0163J2R7	COIL 2.7UH	1	G1C2R7J00002	R144	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L1001	VLQ0655M3R3	COIL 3.3U	1		R145	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L1002	VLQ0784470	COIL	1		R146	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L1003	VLQ0655M3R3	COIL 3.3U	1		R147	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L1004	VLQ0651M220	COIL 22UH	1		R148-76	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	29	
L1005	VLQ0441K100	COIL 10UH	1	G1C100K00017	R177,78	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
L1006	VLQ0441K2R2	COIL 2.2UH	1		R179	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
L1007	VLP0192	COIL	1		R180-94	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	15	
L1008-12	VLF1151A132	COIL	5		R195	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R196	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
P1,P2	VJP3454B096	CONNECTOR (MALE)	2	K1KA96B00021	R197	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
P3,P4	VJP3125B008	CONNECTOR (MALE)	2		R198-17	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	20	
P5-P7	VJP4064K100C	CONNECTOR (MALE)	3	K1KAA0A00020	R218,19	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
					R220	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
Q5	2SB709	TRANSISTOR	1		R221-34	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	14	
Q6	XN4501	TRANSISTOR-RESISTOR	1		R235	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
Q7	2SB709	TRANSISTOR	1		R237,38	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
Q8	XN4501	TRANSISTOR-RESISTOR	1		R239,40	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
Q9	2SB709	TRANSISTOR	1		R243,44	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
Q10	XN4501	TRANSISTOR-RESISTOR	1		R247,48	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R823	ERJ3RBD271	M.RESISTOR CH 1/16W 270	1		C19,20	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R824	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		C21	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
R825	ERJ3RBD471	M.RESISTOR CH 1/16W 470	1		C22	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R828	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C23	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
R831	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		C24	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R832,33	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C25	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
R850	ERDS2TJ103	C.RESISTOR 1/4W 10K	1		C26	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R1001	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		C27	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
R1002	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1		C28,29	ECST0JC686	T.CAPACITOR CH6.3V 68U	2	
R1003,04	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		C30	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
R10017	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C31	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
R10018	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		C32	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R10020	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1		C80-84	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	5	
R10021	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1		C85	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
R10022	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C86-88	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
R10023	ERJ6GEYJ3R3	M.RESISTOR CH 1/10W 3.3	1		C101-03	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
R10024	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C104	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
R10025	VRE0202H47M	M.RESISTOR	1		C105	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R10026,27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C106,07	ECUM1H103KBN	C.CAPACITOR CH6.3V 0.01U	2	
R10028	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1		C108	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
R10029	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1		C109-13	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
R10030	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		C114	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
R10031	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1		C115,16	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R10032	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1						
R10033	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1		D80	MA142K	DIODE	1	
TG4-G9	EYF6CU	TEST POINT	6		IC1	C9ZB00000361	IC	1	
TG1003	EYF6CU	TEST POINT	1		IC2	LVTH244APW	IC	1	C0JBBZ000174
					IC3	FMM4039XC	IC	1	
TH1001	VRT0152090	THERMISTOR	1	D4ZZ00000011	IC10	NJM062V	IC	1	
					IC13	MC10EL16D	IC	1	C0JBZZ000015
TP12,13	EYF6CU	TEST POINT	2		IC14	UPC2726T	IC	1	
TP34	EYF6CU	TEST POINT	1						
TP38	EYF6CU	TEST POINT	1		J1-J5	VJP4131	CONNECTOR (MALE)	5	K1QZB1AD0003
TP41,42	EYF6CU	TEST POINT	2		J6	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
TP74-76	EYF6CU	TEST POINT	3						
TP1001,02	EYF6CU	TEST POINT	2		L1	VLF1151A132	COIL	1	
TP1004	EYF6CU	TEST POINT	1		L2,L3	VLP0183	COIL	2	J0JKC0000007
					L4	VLQ0441K4R7	COIL 4.7UH	1	
VR1	VRV0161B502	V.RESISTOR 5K	1		L10	VLQ07823N3	COIL	1	G1C3N3ZA0001
VR2	VRV0113B201	V.RESISTOR 200	1		L101-04	VLQ07821N8	COIL	4	G1C1N8ZA0001
VR3	VRV0113B101	V.RESISTOR 100	1						
VR4,R5	VRV0113B102	V.RESISTOR 1K	2	D3EC41020001	Q1,Q2	2SC5185	TRANSISTOR	2	
VR6	VRV0113B202	V.RESISTOR 2K	1		Q3-Q5	2SC5012	TRANSISTOR	3	
VR7	VRV0113B102	V.RESISTOR 1K	1	D3EC41020001	Q6,Q7	2SC5185	TRANSISTOR	2	
VR8	VRV0113B101	V.RESISTOR 100	1						
VR9,10	VRV0113B102	V.RESISTOR 1K	2	D3EC41020001	R1-45	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	45	
VR11	VRV0113B202	V.RESISTOR 2K	1		R46-50	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
VR12	VRV0113B102	V.RESISTOR 1K	1	D3EC41020001	R51-57	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	7	
					R58	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
		MISCELLANEOUS			R60	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
VML2143	CARD PULLER		1		R63-65	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
VML2144	CARD PULLER		1		R66,67	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
VMS4950	P.C.B. POST		8		R68	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
VEE0N55	S4 CABLE 2		2		R70	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
XYN26+K5	SCREW		12		R71	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
VEE0N54	S4 CABLE 1		1		R80	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
					R81	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
					R82,83	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
					R84	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
					R85,86	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
					R87	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
■ E13	VEP83460B	HD SDI TX P.C.BOARD	1	(RTL)	R88	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
					R89	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
					R91	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
C1	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R101,02	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
C2	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R103,04	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
C3	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R105,06	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
C4	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R107	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
C5	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R108	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R109	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
C7	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R110	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
C8-16	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	9		R111	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
C17,18	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2		R112,13	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C127	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		P406	VJP1232T	CONNECTOR (MALE) 6P	1	
C201-03	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		P407,08	VJP1230T	CONNECTOR (MALE) 3P	2	
C204	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1						
C205-23	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	19		Q101	2SB710A	TRANSISTOR	1	
C228-31	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4		Q301,02	2SB709-R	TRANSISTOR	2	
C301	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		Q303,04	2SA1462Y34	TRANSISTOR	2	
C302,03	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		Q305,06	2SC3613	TRANSISTOR	2	B1BAAB000005
C304,05	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		Q307,08	2SK508-B	TRANSISTOR	2	
C306,07	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		Q309,10	2SC3613	TRANSISTOR	2	B1BAAB000005
C308-10	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		Q311,12	2SK508-B	TRANSISTOR	2	
C311,12	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		Q313,14	2SC3613	TRANSISTOR	2	B1BAAB000005
C313,14	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2		Q315,16	2SA1462Y34	TRANSISTOR	2	
C316	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1		Q317,18	2SB709-R	TRANSISTOR	2	
C318-20	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	3		Q319,20	2SA1462Y34	TRANSISTOR	2	
C321,22	ECUX1H102JV	C.CAPACITOR CH 16V 2.2U	2		Q321,22	2SC3613	TRANSISTOR	2	B1BAAB000005
C323,24	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		Q323,24	2SK508-B	TRANSISTOR	2	
C327-29	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		Q325,26	2SC3613	TRANSISTOR	2	B1BAAB000005
C330,31	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		Q327,28	2SK508-B	TRANSISTOR	2	
C332	ECUX1E104KBN	C.CAPACITOR CH 16V 2.2U	1		Q329,30	2SC3613	TRANSISTOR	2	B1BAAB000005
C333,34	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		Q331,32	2SA1462Y34	TRANSISTOR	2	
C335,36	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		Q337	XP0554300L	TRANSISTOR-RESISTOR	1	
C337,38	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		Q346	2SD601	TRANSISTOR	1	
C339,40	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2						
C342	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1		QR101,02	UN5113	TRANSISTOR-RESISTOR	2	
C344-46	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	3		QR103	UN5213	TRANSISTOR-RESISTOR	1	
C347,48	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2		QR104	UN5113	TRANSISTOR-RESISTOR	1	
C349,50	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2		QR105-08	UN5211	TRANSISTOR-RESISTOR	4	
C353	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		QR301,02	UN5113	TRANSISTOR-RESISTOR	2	
C356	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		QR303,04	UN5211	TRANSISTOR-RESISTOR	2	
C359	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		QR305,06	UN5113	TRANSISTOR-RESISTOR	2	
C360-70	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	11		QR307,08	UN5211	TRANSISTOR-RESISTOR	2	
C371	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1						
C374	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R101	ERJ3GEYJ750	M.RESISTOR CH 1/16W 75	1	
C375	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		R102	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
C381	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		R103	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
C389	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1		R104	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
C390	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1		R105,06	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2	
C391	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R107	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
C392	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		R109-16	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	8	
C393	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1		R117	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
C394	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R118-25	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	8	
					R126-33	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	8	
D101	MA3J14300L	DIODE	1		R134	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
D102	MA142K	DIODE	1		R140-43	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
D301-04	MA142K	DIODE	4		R146	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R148,49	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC101	LM337T	IC	1	C0CABYG00002	R201	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC102	LT1175CS8	IC	1		R202	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
IC103	LT1129CS8	IC	1		R203	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC104,05	TC4S66F	IC	2	C0JBAS000050	R204,05	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC106	MC10H116M	IC	1	C0JBZZ000018	R206,07	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IC107,08	MC10H131M	IC	2	C0JBZF000003	R208-15	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	8	
IC201	M62370GP	IC	1	C0FBBD000082	R218-21	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
IC202	SN104200DB	IC	1		R222	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC203-05	THC4053FT	IC	3		R223	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
IC206,07	NJM064V	IC	2		R224,25	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2	
IC302	NJM062V	IC	1		R226-28	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	3	
IC303,04	UPC1663G	IC	2	C1CB00000329	R233,34	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
IC305	AN6308S	IC	1		R235,36	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
IC306	UPC2726T	IC	1		R237,38	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	2	
					R239,40	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
L102-04	VLF1151A132	COIL	3		R241,42	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
L301-08	VLQ0163J6R8	COIL 6.8UH	8	G1C6R8J00007	R243,44	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2	
L309	ELJNAR33J	COIL 0.33UH	1		R245,46	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
L310	ELJNAR68J	COIL 0.68UH	1		R247	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
L311,12	VLF1151A132	COIL	2		R250	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
					R253	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
P101	VJP1232T	CONNECTOR (MALE) 5P	1		R254,55	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
P102	VJP3440A030	CONNECTOR (MALE)	1	K1KA30A00114	R256	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
P103	VJP1231T	CONNECTOR (MALE) 4P	1		R257,58	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
P302,03	VJP1233G	CONNECTOR (MALE)	2	K1KA06A00197	R301,02	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
P304,05	VJP1233R	CONNECTOR (MALE)	2	K1KA06A00199	R303-06	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
P401	VJP3083	CONNECTOR (MALE)	1		R307	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
P402	VJP1230T	CONNECTOR (MALE) 3P	1		R308	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
P403	VJP3080	CONNECTOR (MALE)	1		R309	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R5009	ERDS2TJ223	C.RESISTOR 1/4W 22K	1		R102,03	ERJ6RED474	M.RESISTOR CH 1/10W 470K	2	
R5010,11	ERDS2TJ102	C.RESISTOR 1/4W 1K	2		R104	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R5012	ERDS2TJ821	C.RESISTOR 1/4W 820	1		R105	ERG3SJ622	M.RESISTOR 3W 6.2K	1	
R5013	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1		R106	ER025CKF6813	M.RESISTOR 1/4W 680K	1	
R5014	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1		R107	ERJ6RBD104	M.RESISTOR CH 1/10W 100K	1	
R5015	ERDS2TJ221	C.RESISTOR 1/4W 220	1		R108	ERJ6RED394	M.RESISTOR CH 1/10W 390K	1	
R5016	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1		R109	ERJ6RED334	M.RESISTOR CH 1/10W 330K	1	
R5017	ERDS2TJ821	C.RESISTOR 1/4W 820	1		R110-21	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
R5018	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1		R122	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R5019	ERDS2TJ221	C.RESISTOR 1/4W 220	1		R123-34	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
R5020	ERDS2TJ271	C.RESISTOR 1/4W 270	1		R135	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R5021	ERDS2TJ103	C.RESISTOR 1/4W 10K	1		R136	ERJ6RBD683	M.RESISTOR CH 1/10W 68K	1	
R5022-24	ERDS2TJ181	C.RESISTOR 1/4W 180	3		R137	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
					R138-41	ERJ6RED394	M.RESISTOR CH 1/10W 390K	4	
TP5001-07	VJR0646	TEST POINT	7	D0X0R0000022	R142	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
					R143	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
TPG5001,02	VJR0646	TEST POINT	2	D0X0R0000022	R144	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
					R145	ER025CKF6813	M.RESISTOR 1/4W 680K	1	
VR5001	VRV0112B502	V.RESISTOR 5K	1		R146,47	ERJ6RED474	M.RESISTOR CH 1/10W 470K	2	
VR5002	VRV0112B501	V.RESISTOR 500	1		R148	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
					R149	ERG3SJ622	M.RESISTOR 3W 6.2K	1	
		MISCELLANEOUS			R150	ER025CKF6813	M.RESISTOR 1/4W 680K	1	
					R151	ERJ6RBD104	M.RESISTOR CH 1/10W 100K	1	
	VMP3270	P.C.BOARD HOLDER ANGLE	1		R152	ERJ6RED394	M.RESISTOR CH 1/10W 390K	1	
	XNG26B	NUT	1		R153	ERJ6RED334	M.RESISTOR CH 1/10W 330K	1	
	XTV3+6F	SCREW	2		R154-65	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
	XYNV26+K10	SCREW	1		R166	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
					R167-78	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
					R179	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
					R180	ERJ6RBD683	M.RESISTOR CH 1/10W 68K	1	
					R181	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
					R182-85	ERJ6RED394	M.RESISTOR CH 1/10W 390K	4	
■ E23	VEP82095A	AT DRIVE P.C.BOARD	1	(RTL)	R186	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
					R187	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
					R188,89	ER025CKF8253	M.RESISTOR 1/4W 8.2G	2	
C100-03	ECA1HXK330	E.CAPACITOR 50V 33U	4		R190	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
C105	ECCD2H331J	C.CAPACITOR 500V 330P	1		R191	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
C106	ECCD2H151J	C.CAPACITOR 500V 150P	1		R192,93	ER025CKF8253	M.RESISTOR 1/4W 8.2G	2	
C108	ECCD2H331J	C.CAPACITOR 500V 330P	1		R194	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
C109	ECCD2H151J	C.CAPACITOR 500V 150P	1		R195	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
C110	ECCD2H101J	C.CAPACITOR 500V 100P	1						
C111	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		TP1,P2	VJR0646	TEST POINT	2	D0X0R0000022
C112	ECCD2H101J	C.CAPACITOR 500V 100P	1				MISCELLANEOUS		
C113	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1						
						VSC2298	SHIELD CASE	1	
D100	MA151K	DIODE	1			VSC2299	SHIELD COVER	1	
D103,04	MA151K	DIODE	2			VJR0646	TEST POINT	3	D0X0R0000022
D105,06	10E1	DIODE	2						
D107	MA151K	DIODE	1						
D110,11	MA151K	DIODE	2						
L100,01	VLQEL05S101K	COIL 100UH	2						
P1	VJP3079	CONNECTOR (MALE)	1		■ E25	VEP80788A	MECHA IF P.C.BOARD	1	(RTL)
P2	VJP1230T	CONNECTOR (MALE) 3P	1						
P3,P4	VJP1143	CONNECTOR (MALE)	2	K1KA05A00151					
P5	VJP1231T	CONNECTOR (MALE) 4P	1		D1-10	10E1	DIODE	10	
					D11,12	MA165	DIODE	2	MA2C165
Q100-04	2SA1486-K	TRANSISTOR	5		D13	10E1	DIODE	1	
Q105,06	2SC3840-K	TRANSISTOR	2						
Q107,08	2SA1486-K	TRANSISTOR	2		P561	VJP1242T	CONNECTOR (MALE)	1	
Q109-13	2SC3840-K	TRANSISTOR	5		P562	VJP1243G	CONNECTOR (MALE)	1	K1KA03B00087
Q114	2SD601A-R	TRANSISTOR	1		P563	VJP3080	CONNECTOR (MALE)	1	
Q115,16	2SD1385	TRANSISTOR	2		P564	VJP1235T	CONNECTOR (MALE) 8P	1	
Q117	2SD601A-R	TRANSISTOR	1		P565	VJP1247T	CONNECTOR (MALE)	1	
Q118-22	2SA1486-K	TRANSISTOR	5		P568	VJP1243T	CONNECTOR (MALE) 3P	1	
Q123,24	2SC3840-K	TRANSISTOR	2		P569	VJP1230T	CONNECTOR (MALE) 3P	1	
Q125,26	2SA1486-K	TRANSISTOR	2		P571	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198
Q127-31	2SC3840-K	TRANSISTOR	5		P572	VJP1232T	CONNECTOR (MALE) 5P	1	
Q132	2SD601A-R	TRANSISTOR	1		P574	VJP1244G	CONNECTOR (MALE)	1	K1KA04B00110
Q133,34	2SD1385	TRANSISTOR	2		P575	VJP1244T	CONNECTOR (MALE) 4P	1	
Q135	2SD601A-R	TRANSISTOR	1		P576	VJP1231R	CONNECTOR (MALE)	1	K1KA04A00221
					P577	VJP1231T	CONNECTOR (MALE) 4P	1	
R100	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1		P578	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198
R101	ER025CKF6813	M.RESISTOR 1/4W 680K	1		P579	VJP1230T	CONNECTOR (MALE) 3P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P580	VJP1243G	CONNECTOR (MALE)	1	K1KA03B00087	IC13,14	0P177FS	IC	2	
P581	VJP1230T	CONNECTOR (MALE) 3P	1		IC15-17	NJM4580ED	IC	3	C0ABBB000123
P582	VJP1243T	CONNECTOR (MALE) 3P	1		IC18	UPD4538BG	IC	1	COJBAM000018
P583	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197					
P584	VJP1243T	CONNECTOR (MALE) 3P	1		P1	VJP1231T	CONNECTOR (MALE) 4P	1	
P585	VJP1243R	CONNECTOR (MALE)	1	K1KA03B00088	P2	VJP1231G	CONNECTOR (MALE)	1	K1KA04A00220
P587,88	VJP3091	CONNECTOR (MALE)	2		P3	VJP1231R	CONNECTOR (MALE)	1	K1KA04A00221
P589	VJP3079	CONNECTOR (MALE)	1		P4	VJP1231B	CONNECTOR (MALE)	1	K1KA04A00129
P590,91	VJP1230T	CONNECTOR (MALE) 3P	2		P6	VJP1230T	CONNECTOR (MALE) 3P	1	
P595	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197	P7	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198
P596	VJP1243T	CONNECTOR (MALE) 3P	1		P8	VJP3082	CONNECTOR (MALE)	1	
P597	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198	P9	VJP3081	CONNECTOR (MALE)	1	
P598	VJP1243R	CONNECTOR (MALE)	1	K1KA03B00088	P10	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197
P599	VJP1244R	CONNECTOR (MALE)	1	K1KA04B00111	P11	VJP1230B	CONNECTOR (MALE)	1	K1KA03A00111
P600	VJP3082	CONNECTOR (MALE)	1						
P701	VJP3440A030	CONNECTOR (MALE)	1	K1KA30A00114	Q1	2SD601-R	TRANSISTOR	1	
P702	VJP3418A080	CONNECTOR (MALE)	1	K1KA80A00066	Q2-Q5	UN5213	TRANSISTOR-RESISTOR	4	
P61021	VJP3091	CONNECTOR (MALE)	1						
P61022	VJP1244T	CONNECTOR (MALE) 4P	1		R1,R2	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	2	
					R3	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
Q1	UN1212	TRANSISTOR-RESISTOR	1	UNR1212	R4	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
Q2	2SB835	TRANSISTOR	1		R5	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
					R6	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R1-15	ERDS2TJ181	C.RESISTOR 1/4W 180	15		R7,R8	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	2	
R16,17	ERDS2TJ151	C.RESISTOR 1/4W 150	2		R9	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R19	ERDS2TJ821	C.RESISTOR 1/4W 820	1		R10	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R20	ERDS2TJ103	C.RESISTOR 1/4W 10K	1		R11	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
					R12	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
		MISCELLANEOUS			R13,14	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
					R15	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
	VMX1183	POLY WASHER	5		R16	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
	VHN0011	NYLON LATCH	4		R17	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
	VMZ2143	BARRIER	1		R18	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
	VMZ2144	BARRIER	2		R19,20	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	2	
	VMZ2164	INSULATION BARRIER	2		R21	ERJ3GEYJ274	M.RESISTOR CH 1/16W 270K	1	
					R22-24	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	3	
					R25-27	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	3	
					R28	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
					R29-31	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
					R32-34	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	3	
■ E26	VEP82234A	SERVO CONTROL P.C.BOARD	1	(RTL)	R35	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
					R36	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R37	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
C1	EEVHB1H1R0	E.CAPACITOR 50V 1U	1		R38	ERJ3GEYJ155	M.RESISTOR CH 1/16W 1.5M	1	
C2,C3	EEVHB1E330P	E.CAPACITOR 25V 33U	2		R39	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
C4,C5	EEVHB1C470	E.CAPACITOR 16V 47U	2		R40,41	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
C6-C9	ECUX1H103ZFY	C.CAPACITOR CH 50V 0.01U	4		R42	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
C10,11	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	2		R43,44	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	2	
C15	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1		R45	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
C16-24	ECUX1H103ZFY	C.CAPACITOR CH 50V 0.01U	9		R46-48	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	3	
C25	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1		R49	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
C29-31	ECUX1H103ZFY	C.CAPACITOR CH 50V 0.01U	3		R50	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
C32	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1		R51	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
C33	ECUX1H103ZFY	C.CAPACITOR CH 50V 0.01U	1		R52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
C34,35	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2		R53-57	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	
C36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		R58,59	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
C37	ECUX1H103ZFY	C.CAPACITOR CH 50V 0.01U	1		R60-62	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	3	
C38,39	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2		R63	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
C40-44	ECUX1H103ZFY	C.CAPACITOR CH 50V 0.01U	5		R64	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C45	ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1		R65,66	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	2	
C46	VCK0152	C.CAPACITOR	1	F1L1C1060016	R67	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C47	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		R68,69	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	2	
C48	ECUX1E104ZFY	C.CAPACITOR CH 25V 0.1U	1		R70	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
C49-52	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	4		R71	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
C53	ECUX1H103ZFY	C.CAPACITOR CH 50V 0.01U	1		R72	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
					R73	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
D1-D3	MA157	DIODE	3		R74	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
					R75	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
IC1-C3	VLF0931	FILTER	3	F1Y2A1030001	R76	ERJ3GEYJ334	M.RESISTOR CH 1/10W 330K	1	
IC4	NJM79L12UA	IC	1		R77	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC5	NJM78L12UA	IC	1	C0CBAKC00001	R78	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
IC6,C7	LT1129CS8	IC	2		R80	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
IC8	NJM2904M	IC	1		R81	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
IC9-11	NJM4580ED	IC	3	C0ABBB000123	R82	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
IC12	NJM2903M	IC	1	C0BBBA000019	R83	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R84	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1		D3006	MA3082M	DIODE	1	
R85	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		D3008	MA3082M	DIODE	1	
R86	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1		D3009,10	MA3062M	DIODE	2	
R87	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		D3011	MA716	DIODE	1	
R88	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1		D3012,13	MA142K	DIODE	2	
TP1-P5	VJR0646	TEST POINT	5	D0X0R0000022	IC3001	AD8055AR	IC	1	
					IC3002	XC62FP5002P	IC	1	
VR1	VRV0112B104	V.RESISTOR 100K	1		IC3003	XC62DN5002P	IC	1	
VR2	VRV0112B202	V.RESISTOR 2K	1		IC3004	THC4053FT	IC	1	
					IC3005	TVHC244FT	IC	1	
		MISCELLANEOUS			IC3006	TC7W04FU	IC	1	
					IC3007-10	TC74HC4094AF	IC	4	
	VJR0646	TEST POINT	6	D0X0R0000022	IC3011	TC74HC4050AF	IC	1	
	VMA8463-1	TENSION P.C.B. BRACKET	1		IC3012-15	TVHC165FT	IC	4	
	XTV26+6F	SCREW	4		IC3016,17	SN75C1168NS	IC	2	
					IC3018,19	SN74S1053NS	IC	2	
					J3001-18	VJS3901	CONNECTOR (FEMALE)	18	K1CB204H0004
					J3020-25	VJS3417	CONNECTOR (FEMALE)	6	K1AB103A0007
					J3026-33	VJP3417	CONNECTOR (MALE)	8	K1AA103A0003
■ E27	VEP83512B	REAR JACK P.C.BOARD	1	(RTL)					
					L3001-14	VLQ0319K100	COIL 10UH	14	G1C100K00023
					L3015,16	VLF1151A132	COIL	2	
					L3017,18	VLQ0319K100	COIL 10UH	2	G1C100K00023
					L3019-21	VLF1151A132	COIL	3	
C3001,02	EEVHB1A330	E.CAPACITOR 10V 33U	2		P3001-05	VJP1243T	CONNECTOR (MALE) 3P	5	
C3003,04	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		P3100,01	VJP3414A009	CONNECTOR (MALE)	2	K1FB109A0016
C3005,06	EEVHB1A330	E.CAPACITOR 10V 33U	2		P3102	VJP3414A015	CONNECTOR (MALE)	1	K1FB115A0008
C3007,08	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		P3103	VJP3414A009	CONNECTOR (MALE)	1	K1FB109A0016
C3009-11	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	3		P3104	VJP3414A025	CONNECTOR (MALE)	1	K1FB125A0011
C3012	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		P3105	VJP4358A120	CONNECTOR (MALE)	1	
C3013,14	EEVHB1A330	E.CAPACITOR 10V 33U	2		P3106	VJS4356	CONNECTOR (FEMALE)	1	
C3015,16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		P3107	VJP3440B020	CONNECTOR (MALE)	1	K1KA20B00028
C3017,18	EEVHB1A330	E.CAPACITOR 10V 33U	2						
C3019,20	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		Q3001,02	2SB709	TRANSISTOR	2	
C3021,22	EEVHB1A330	E.CAPACITOR 10V 33U	2		Q3003	2SC2295	TRANSISTOR	1	
C3023	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		Q3004	XN4501	TRANSISTOR-RESISTOR	1	
C3024,25	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		Q3005,06	2SB709	TRANSISTOR	2	
C3026	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	1		Q3007	2SC2295	TRANSISTOR	1	
C3027	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		Q3008	XN4501	TRANSISTOR-RESISTOR	1	
C3029,30	EEVHB1A330	E.CAPACITOR 10V 33U	2		Q3010,11	2SB709	TRANSISTOR	2	
C3031,32	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		Q3012,13	XN4501	TRANSISTOR-RESISTOR	2	
C3033,34	EEVHB1A330	E.CAPACITOR 10V 33U	2		Q3014	2SB709	TRANSISTOR	1	
C3035,36	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		Q3015	XN4501	TRANSISTOR-RESISTOR	1	
C3037	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		Q3016-27	XN1214	TRANSISTOR-RESISTOR	12	
C3038,39	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2						
C3040,41	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	2		R3001	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
C3042,43	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		R3002	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C3044-47	EEVHB1A330	E.CAPACITOR 10V 33U	4		R3003	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
C3049-54	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6		R3004	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
C3057	EEVHB1A330	E.CAPACITOR 10V 33U	1		R3005,06	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
C3059,60	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		R3007,08	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
C3061	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		R3009,10	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
C3062,63	EEVHB1A330	E.CAPACITOR 10V 33U	2		R3011	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C3064,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		R3012	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
C3066	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		R3013	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C3067,68	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		R3014	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
C3100	EEVHB1C100	E.CAPACITOR 16V 10U	1		R3015,16	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	2	
C3101	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1		R3017	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C3102-09	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	8		R3018	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
C3110	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		R3019	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
C3111-23	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	13		R3020	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
C3124	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		R3022	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
C3125-35	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	11		R3023	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C3136	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		R3025	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C3137-52	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	16		R3026	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
C3153	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		R3027	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
C3154-56	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	3		R3028	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
C3157-67	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	11		R3029	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C3200-11	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	12		R3030	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
					R3031-33	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	3	
D3001	MA3J14300L	DIODE	1		R3034	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
D3002	MA142K	DIODE	1		R3035	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
D3003	MA3082M	DIODE	1						
D3004	MA3J14300L	DIODE	1						
D3005	MA142K	DIODE	1						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR1104,05	UN2213	TRANSISTOR-RESISTOR	2		■ E29	VEP81212A	POWER 2 P.C.BOARD	1	(RTL)
△ R1101	ERC12AGM334	S.RESISTOR 1/2W 330K	1						
△ R1102,03	ERU5TEJ100	F.RESISTOR 5W 10	2						
R1104	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		C1004	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1105,06	ERG2SJ220	M.RESISTOR 2W 22	2		C1021,22	ECA1CXL101	E.CAPACITOR 16V 100U	2	
R1107	VRE0206	M.RESISTOR	1	D0XGR05J0002	C1023,24	EEUFC1V391	E.CAPACITOR 35V 390U	2	
R1108	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1		C1025-34	ECQE6473KF	C.CAPACITOR 1000P	10	
R1109	ERJ14YJ220	M.RESISTOR CH 1/4W 22	1		C1036	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1110	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1		C1038	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1111	ERJ14YJ220	M.RESISTOR CH 1/4W 22	1		C1040,41	EEUFC1A682	E.CAPACITOR 10V 6800U	2	
R1112	ERJ12YJ100	M.RESISTOR CH 1/2W 10	1		C1043	EEUFC1V391	E.CAPACITOR 35V 390U	1	
R1113	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1		C1045	EEUFC1J101	E.CAPACITOR 63V 100U	1	
R1114	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1		C1046,47	EEUFC1E331	E.CAPACITOR 50V 330U	2	
R1115,16	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2		C1048	EEUFC1A122	E.CAPACITOR 10V 1200U	1	
R1117,18	ERG3SJ333	M.RESISTOR 3W 33K	2		C1050	EEUFC1A122	E.CAPACITOR 10V 1200U	1	
R1119	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1		C1051	ECA1CXL101	E.CAPACITOR 16V 100U	1	
R1120	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1		C1052,53	EEUFC1J101	E.CAPACITOR 63V 100U	2	
R1122	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1		C1055,56	ECA1EXL101	E.CAPACITOR 25V 100U	2	
R1123	ERJ14YJ474	M.RESISTOR CH 1/4W 470K	1		C1057,58	ECQE6473KF	C.CAPACITOR 1000P	2	
R1124	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1		C1059,60	ECA1CXL101	E.CAPACITOR 16V 100U	2	
R1125	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		C1061	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
R1126	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1		C1062	VCK0300470	C.CAPACITOR 47P	1	
R1129	ERJ14YJ474	M.RESISTOR CH 1/4W 470K	1		C1063	ECA1VXL470	E.CAPACITOR 35V 47U	1	
R1130	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		C1065	VCK0300470	C.CAPACITOR 47P	1	
R1131	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		C1066	ECA1VXL470	E.CAPACITOR 35V 47U	1	
R1132	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		C1067,68	ECQE6473KF	C.CAPACITOR 1000P	2	
R1134,35	ERJ12YJ224	M.RESISTOR CH 1/2W 220K	2		C1069,70	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	2	
R1136	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	1		C1071	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
R1137	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		C1072	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
R1138	ERJ12YJ472	M.RESISTOR CH 1/2W 4.7K	1		C1073	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
R1139-41	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	3		C1074	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1142	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1		C1075	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
R1143,44	ERJ12YJ224	M.RESISTOR CH 1/2W 220K	2		C1076,77	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
R1145	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		C1080,81	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
R1146	VRT0142	THERMISTOR	1	D4DDB3310005	C1084-89	ECQE6473KF	C.CAPACITOR 1000P	6	
R1147	ERG2SJ221	M.RESISTOR 2W 220	1		C1090	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1148-50	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	3		C1093	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1151	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		C1100	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1153,54	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	2		C1101	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
R1155,56	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		C1102	ECA1VXL470	E.CAPACITOR 35V 47U	1	
R1158	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		C1103	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
R1159	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		C1104	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
R1160	ERJ6RED224	M.RESISTOR CH 1/10W 220K	1		C1105	ECA1VXL470	E.CAPACITOR 35V 47U	1	
R1161	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1						
R1162	ERJ6RED334	M.RESISTOR CH 1/10W 330K	1		D1030	S60SC4M	DIODE	1	B0JBSE000024
R1163	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		D1031	D8LC20U	DIODE	1	
R1165	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1		D1032	U05NU44	DIODE	1	
R1166	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		D1033-35	D8LC20U	DIODE	3	
R1171,72	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2		D1036	D30SC4M	DIODE	1	B0JBSE000022
R1180	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1		D1037,38	D8LC20U	DIODE	2	
R1181-83	ERJ12YJ224	M.RESISTOR CH 1/2W 220K	3		D1040,41	RC3B2	DIODE	2	
R1184	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		D1044,45	U05NU44	DIODE	2	
					D1046	EG01C	DIODE	1	B0HAGV000001
VR1102	VRV0111B501	V.RESISTOR 500	1		D1047	U1GU44	DIODE	1	
					D1048	MA3240-H	DIODE	1	
		MISCELLANEOUS			D1049	EG01C	DIODE	1	B0HAGV000001
					D1050	U1GU44	DIODE	1	
	VJR1008	EARTH LUG	2		D1051	MA3240-H	DIODE	1	
	VJF1348	CLAMPER	1		D1052	MA151WK	DIODE	1	
△	VMZ0965	CAPACITOR COVER	3		D1053	D8LC20U	DIODE	1	
△	VMZ1608	CAPACITOR TUBE	4		D1054	MA151WK	DIODE	1	
	VSC3327	SHIELD CASE	1		D1055,56	MA3027-H	DIODE	2	
	VSC5003	HEAT SINK (A)	1		D1057,58	MA2270A	DIODE	2	
	VSC5142	HEAT SINK (D)	1		D1059,60	ERA15-08	DIODE	2	B0AAMT000001
	XYN3+C8FZS	SCREW	3						
	XYE3+EF8	SCREW	3		IC1011	UPC1944J	IC	1	C0DAZLB00001
	XYN3+F6	SCREW	3		IC1012	UPC1093J	IC	1	C0DAEMC00002
	XYN3+F10	SCREW	2						
	XNG3BS	NUT	1		L1012	VLQ0479	COIL	1	
	XYN3+F8FZ	SCREW	3		L1013	VLQ0354	COIL	1	
					L1014	VLQ0479	COIL	1	
					L1015,16	VLQ0605	COIL	2	
					L1017	VLQ0354	COIL	1	
					L1018	VLQ0479	COIL	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q1402,03	2SD1478-R	TRANSISTOR	2		D1525	MA3051-M	DIODE	1	MAZ30510ML
Q1404	2SB710A-R	TRANSISTOR	1		D1526	MA3160-L	DIODE	1	
QR1401-05	UN2213	TRANSISTOR-RESISTOR	5		IC1501	TA75S393F	IC	1	
R1409	ERJ14YJ4R7	M.RESISTOR CH 1/4W 4.7	1		IC1502,03	UPC1093J	IC	2	C0DAEMC00002
R1410	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		P1501	VJS3042B006W	CONNECTOR (FEMALE)	1	K1KB06B00015
R1411	ERJ6RBD241	M.RESISTOR CH 1/10W 240	1		P1502	VJS3042F012W	CONNECTOR (FEMALE) 12P	1	K1KB12B00030
R1412,13	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2		P1503	VJS3042B003W	CONNECTOR (FEMALE)	1	K1KB03B00007
R1415	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		Q1501,02	XN4501	TRANSISTOR-RESISTOR	2	
R1416	ERJ14YJ4R7	M.RESISTOR CH 1/4W 4.7	1		Q1503	XN4401	TRANSISTOR-RESISTOR	1	
R1417	ERJ6RBD241	M.RESISTOR CH 1/10W 240	1		Q1505	2SD602A-R	TRANSISTOR	1	
R1418,19	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	2		Q1506-10	XN4401	TRANSISTOR-RESISTOR	5	
R1420	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1		Q1511-13	XN4501	TRANSISTOR-RESISTOR	3	
R1422	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		Q1516	2SB710A-R	TRANSISTOR	1	
R1423,24	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	2		Q1517	2SD602A-R	TRANSISTOR	1	
R1426	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	1		Q1518	2SB710A-R	TRANSISTOR	1	
R1427	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		QR1501	UN2211	TRANSISTOR-RESISTOR	1	
R1428	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		QR1502	UN2111	TRANSISTOR-RESISTOR	1	
R1429	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		QR1503	UN2211	TRANSISTOR-RESISTOR	1	
R1430	ERJ6RBD391	M.RESISTOR CH 1/10W 390	1		QR1504	UN2113	TRANSISTOR-RESISTOR	1	
R1431	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1		QR1505	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L
R1432	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		QR1506	UN2211	TRANSISTOR-RESISTOR	1	
R1433,34	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	2		QR1508	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L
R1436	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		QR1509	UN2211	TRANSISTOR-RESISTOR	1	
R1437	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R1501-07	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	7	
R1438	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		R1508	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1439	ERJ6RBD131	M.RESISTOR CH 1/10W 130	1		R1509	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R1442	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1		R1510-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
R1448,49	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R1514	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R1450-53	ERJ6GEYG564	M.RESISTOR CH 1/10W 560K	4		R1515,16	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2	
R1454	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R1517	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1497	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R1518	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
■ E31	VEP81214A	POWER SUB 2 P.C. BOARD	1 (RTL)		R1519	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
C1501,02	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2		R1521	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
C1503	ECA1HXS100	E.CAPACITOR 50V 10U	1		R1522	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C1504-14	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	11		R1523	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
C1517-26	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	10		R1524	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
C1527	ECA1HXS100	E.CAPACITOR 50V 10U	1		R1526	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
C1528	ECA1HXL2R2	E.CAPACITOR 50V 2.2U	1		R1527	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C1529	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1528	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
C1530	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		R1529	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
C1531	ECA1HXL2R2	E.CAPACITOR 50V 2.2U	1		R1531	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
C1532	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1532	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C1536-38	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3		R1533	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
C1540-42	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3		R1534	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
C1543	ECA1HXS100	E.CAPACITOR 50V 10U	1		R1536	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
C1544	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1537	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C1548,49	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2		R1538	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
C1551	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1539	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
D1501	MA3075-M	DIODE	1		R1541	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
D1502	MA3160-L	DIODE	1		R1542	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
D1503	MA3200-M	DIODE	1		R1543	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
D1504	MA3120-M	DIODE	1		R1544	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
D1505	MA3200-M	DIODE	1		R1545	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
D1506	MA3091-M	DIODE	1		R1547	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
D1507	MA3120-M	DIODE	1		R1549	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1	
D1508	MA152WA	DIODE	1		R1551	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
D1509	MA152WK	DIODE	1		R1553	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1	
D1510	MA152K	DIODE	1		R1555	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
D1511	MA152WA	DIODE	1		R1557-60	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	4	
D1512	MA152WK	DIODE	1		R1561	ERJ6RBD563	M.RESISTOR CH 1/10W 56K	1	
D1513	MA152K	DIODE	1		R1562	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
D1515	MA152WK	DIODE	1		R1563	ERJ6RBD563	M.RESISTOR CH 1/10W 56K	1	
D1516	MA152WA	DIODE	1		R1568	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	1	
D1519	MA152K	DIODE	1						
D1522	MA152K	DIODE	1						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E32	VEP81215A	POWER INT P.C.BOARD	1	(RTL)	C6111	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
					C6115	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
		MISCELLANEOUS			C6116,17	ECEA1CGE471	E.CAPACITOR 16V 470U	2	
					C6118	EEUFC1V101	E.CAPACITOR 35V 100U	1	
					C6120	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
	VJS4033	CONNECTOR (FEMALE)	2	K1KB06B00023	C6121,22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
					C6123	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
					C6124	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
					C6125	ECA1CHG221	E.CAPACITOR 16V 220U	1	
					C6126	EEVHB1C470	E.CAPACITOR 16V 47U	1	
					C6127	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
■ E33	VEP80792A	AUTO OFF LED P.C.BOARD	1	(RTL)	C6130-46	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	17	
D1	LN38GP	DIODE	1		D6001	DE5SC4M-4061	DIODE	1	
D2	VLL0029	LED	1	B3CAF0000005	D6002,03	MA151K	DIODE	2	
					D6005	MA704A	DIODE	1	
P1	VJP1602T	CONNECTOR (MALE)	1		D6006	DE5SC4M-4061	DIODE	1	
P2	VJP1596T	CONNECTOR (MALE)	1						
P3	VJP1598T	CONNECTOR (MALE) 5P	1	K1KA05A00104	FL6001	VLFO576	FILTER	1	J0HACH000011
R1,R2	ERDS2TJ221	C.RESISTOR 1/4W 220	2		IC6001	TE7751	IC	1	C1ZBZ0000156
		MISCELLANEOUS			IC6003	TLC549IPS	IC	1	
					IC6011,12	VS10908	IC	2	
					IC6016	NJM2904M	IC	1	
	VMX1223	LED SPACER	1		IC6020,21	SN75C1168NS	IC	2	
					IC6022	TVHC14FT	IC	1	
					IC6024	TVHC32FT	IC	1	
					IC6025	TVHC08FT	IC	1	
					IC6050	IDT71321L55F	IC	1	C3HBCC000002
					IC6051-53	TVHC244FT	IC	3	
■ E34	VEP80790A	EJECT P.C.BOARD	1	(RTL)	IC6054,55	TC74HC4040AF	IC	2	C0JBAK000098
					IC6056	TVHC165FT	IC	1	
					IC6057	TC74HC4094AF	IC	1	
P1	VJP1596T	CONNECTOR (MALE)	1		IC6058	UPD71054GB	IC	1	
					IC6059	TVHC164FT	IC	1	
SW1	VSP0543	SWITCH	1	K0F111A00219	IC6060,61	TVHC74FT	IC	2	
					IC6062	TVHC32FT	IC	1	
					IC6063	C0JBAB000196	IC	1	
					IC6064	TVHC08FT	IC	1	
					IC6080	LT1170CQ	IC	1	
■ E35	VEP80804A	ERROR LED P.C.BOARD	1	(RTL)	IC6082	TVHC244FT	IC	1	
					IC6083	XC62FP3202P	IC	1	
					IC6085	TVHT245F	IC	1	
D1,D2	LN28RP	LED	2		IC6087	LTC1624IS8	IC	1	
D3	LN48YP	DIODE	1		IC6088	TVHC32FT	IC	1	
D4	LN38GP	DIODE	1						
					L1	VLQ0576	COIL	1	
					L3	VLQ0576	COIL	1	
P1	VJP1598T	CONNECTOR (MALE) 5P	1	K1KA05A00104	L6001	VLQ0922	COIL	1	
					L6002	VLQ0407100M	COIL 10UH	1	G0A100H00003
R1-R4	ERDS2TJ221	C.RESISTOR 1/4W 220	4		L6003	VLQ1151A132	COIL	1	
		MISCELLANEOUS			L6004	VLQ0650M470	COIL 47UH	1	
					L6005	VLP0133	COIL	1	
	VMX1223	LED SPACER	4						
					P6001	VJP1152	CONNECTOR (MALE)	1	K1KA08B00140
					P6002	VJP1244T	CONNECTOR (MALE) 4P	1	
					P6003	VJP3125B008	CONNECTOR (MALE)	1	
					P6004	VJP3409A032	CONNECTOR (MALE)	1	
					P6005	VJS3886A052	CONNECTOR (FEMALE)	1	
■ E36	VEP86300A	FRONT CONTROL 1 P.C.BOARD	1	(RTL)	P6007	VJP3440A020	CONNECTOR (MALE)	1	K1KA20A00187
					P6008	VJP3440A008	CONNECTOR (MALE)	1	
BZ6001	EFBCD37C11	CRYSTAL OSCILLATOR	1		Q6001	2SD946A	TRANSISTOR	1	
					Q6003	2SD601A	TRANSISTOR	1	
C6001-06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6		Q6004	2SK1596	TRANSISTOR	1	
C6008	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1						
C6011	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1		QR6001,02	UN2214	TRANSISTOR-RESISTOR	2	UNR221400L
C6020,21	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	2		QR6003-05	UN2111	TRANSISTOR-RESISTOR	3	
C6022-26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5		QR6006	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L
C6050	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1						
C6051-79	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	29		R6004,05	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
C6100,01	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2		R6012,13	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
C6102	EEVHB1A330	E.CAPACITOR 10V 33U	1		R6014	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
C6103-06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4		R6018-36	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	19	
C6109	EEVHB1H2R2	E.CAPACITOR 50V 2.2U	1		R6061	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6064	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R6065,66	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C24-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	11	
R6067,68	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		C40,41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
R6069	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1		C43-52	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	10	
R6070	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1		C70	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R6071	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C71	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R6072-84	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	13		C72-85	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	14	
R6085	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C87-95	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
R6086	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1		C100-14	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	15	
R6087-90	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	4		C122	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
R6091-94	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	4		C123	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R6095-97	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	3		C125-30	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
R6098	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		C200,01	ECCF1H120J	C.CAPACITOR 50V 12P	2	
R6099-01	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3		C202	ECEA1HGE3R3	E.CAPACITOR 50V 3.3U	1	
R6102-04	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3						
R6105,06	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2		D1,D2	MA165	DIODE	2	MA2C165
R6107-10	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4						
R6113-20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	8		IC1	THC4053FT	IC	1	
R6122	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		IC2	MBF8TA90PFTS	IC	1	
R6123-33	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	11		IC3	TVHC08FT	IC	1	
R6134,35	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		IC4	TL7705CPSB	IC	1	C0EBS0000002
R6138-42	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5		IC5	MC68332CFC16	IC	1	C2GBC0000060
R6144,45	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		IC6	C0JBAZ000527	IC	1	C0JBAZ000526
R6150	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		IC8	VSI3438J	IC	1	
R6151	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		IC9	VSI3439J	IC	1	
R6152-56	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	5		IC11,12	TVHC138FT	IC	2	
R6157,58	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2		IC13	TVHC14FT	IC	1	
R6161-64	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4		IC15,16	CY7C19920ZC	IC	2	
R6165	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1		IC17-19	TVHC244FT	IC	3	
R6166	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1		IC20,21	TVHC574FT	IC	2	
R6167	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1		IC22	TVHT244FT	IC	1	
R6168	ERJ6RBD302	M.RESISTOR CH 1/10W 3K	1		IC23	TVHC244FT	IC	1	
R6169	VRE0202H68M	M.RESISTOR CH	1		IC24	TVHC32FT	IC	1	
R6170	ERJ3GEYJ303	M.RESISTOR CH 1/16W 30K	1		IC25,26	TVHT244FT	IC	2	
R6171	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1		IC36	HD63484CP8	IC	1	
R6172	ERJ6RED100	M.RESISTOR CH 1/10W 10	1		IC37-42	MC74HC574AF	IC	6	
R6173,74	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		IC43	VSI0906	IC	1	
R6177-98	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	22		IC44	VSI2966	IC	1	
R6199	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		IC45,46	CY7C19920ZC	IC	2	
R6201	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		IC47,48	TVHT245F	IC	2	
R6203,04	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		IC49,50	TVHC165FT	IC	2	
R6207	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		IC51	C0JBA000196	IC	1	
R6214	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		IC52	X9144L7T100	IC	1	
R6216-19	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	4		IC53	LVX3245QSC	IC	1	
R6220-43	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	24		IC54	TE7751	IC	1	C1ZBZ0000156
R6252-57	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	6		IC56-58	LVX3245QSC	IC	3	
R6258	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC59	TVHC08FT	IC	1	
R6259,60	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		IC60	TVHC02FT	IC	1	
R6263	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1		IC61,62	TVHT245F	IC	2	
R6300	ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1		IC63	TVHC161FT	IC	1	
R6301,02	ERDS2TJ103	C.RESISTOR 1/4W 10K	2		IC64	HD74HC674P	IC	1	C0JAAQ000076
					IC65,66	TVHT244FT	IC	2	
TP6001-04	EYF6CU	TEST POINT	4						
					IS1,S2	VJS2336A032	CONNECTOR (FEMALE)	2	K3E032C00033
VR6001,02	VRV0111B103	V.RESISTOR 10K	2		IS3,S4	VJS3096328	CONNECTOR (FEMALE)	2	K3E028C00055
VR6003	VRV0111B102	V.RESISTOR 1K	1						
VR6004	VRV0111B103	V.RESISTOR 10K	1		L1-L5	VLQ0576	COIL	5	
		MISCELLANEOUS			P1	VJP3440B030	CONNECTOR (MALE)	1	K1KA30B00024
					P2	VJP3440B006	CONNECTOR (MALE)	1	K1KA06B00043
					P3	VJP3440B032	CONNECTOR (MALE)	1	K1KA32B00022
					P4	VJP3409A052	CONNECTOR (MALE)	1	
					P6	VJP2540B016	CONNECTOR (MALE) 16P	1	K1KA16B00028
					Q1	2SA1128	TRANSISTOR	1	
					Q2	2SB1440	TRANSISTOR	1	
■ E37	VEP86301A	FRONT CONTROL 2 P.C.BOARD	1 (RTL)						
					R1-R3	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	3	
					R4	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R5	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R6-R9	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	4	
					R10	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
					R11,12	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
					R13	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R14	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
C1-C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3						
C7,C8	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2						
C9	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1						
C10-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4						
C15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1						
C16,17	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	2						

ELECTRICAL REPLACEMENT PARTS LIST (AJ-HD3700HE)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP83563A	D5 REC PB P.C.BOARD	1	(RTL)
■ E2	VEP84373B	PCM PB SUB P.C.BOARD	1	(RTL)
■ E3	VEP84373A	PCM PB SUB P.C.BOARD	1	(RTL)
■ E4	VEP83529A	REC SUB P.C.BOARD	1	(RTL)
■ E5	VEP83530A	PB SUB P.C.BOARD	1	(RTL)
■ E6	VEP83503A	PB PROC P.C.BOARD	1	(RTL)
■	VEP83552A	L2 GATE P.C.BOARD	1	(RTL)FOR VEP83503A
■	VEP83575A	CLK DRV P.C.BOARD	1	(RTL)FOR VEP83503A
■ E7	VEP86316A	SYSCON SERVO P.C.BOARD	1	(RTL)
■ E8	VEP82092B	DRIVE P.C.BOARD	1	(RTL)
■ E9	VEP85198A	EQ P.C.BOARD	1	(RTL)
■ E10	VEP84351A	CUE TC P.C.BOARD	1	(RTL)
■ E11	VEP84352A	A AD/DA P.C.BOARD	1	(RTL)
■ E12	VEP83506A	SDI OUT P.C.BOARD	1	(RTL)
■ E13	VEP83460B	HD SDI TX P.C.BOARD	1	(RTL)
■ E14	VEP83509C	SDI IN P.C.BOARD	1	(RTL)
■ E15	VEP83459B	HD SDI RX P.C.BOARD	1	(RTL)
■ E16	VEP83510A	RATE CON P.C.BOARD	1	(RTL)
■ E18	VEP89136A	L MOTHER P.C.BOARD	1	(RTL)
■ E19	VEP89137A	S MOTHER P.C.BOARD	1	(RTL)
■ E20	VEP89138B	SUB MOTHER P.C.BOARD	1	(RTL)
■ E21	VEP85188A	REC AMP P.C.BOARD	1	(RTL)
■ E22	VEP85040B	CYLINDER POWER P.C.BOARD	1	(RTL)
■ E23	VEP82095A	AT DRIVE P.C.BOARD	1	(RTL)
■ E24	VEP82096A	AT POWER P.C.BOARD	1	(RTL)
■ E25	VEP80788A	MECHA IF P.C.BOARD	1	(RTL)
■ E26	VEP82234A	SERVO CONTROL P.C.BOARD	1	(RTL)
■ E27	VEP83512C	REAR JACK P.C.BOARD	1	(RTL)
■ E28	VEP81211B	POWER 1 P.C.BOARD	1	(RTL)
■ E29	VEP81212A	POWER 2 P.C.BOARD	1	(RTL)
■ E30	VEP81213A	POWER SUB1 P.C.BOARD	1	(RTL)
■ E31	VEP81214A	POWER SUB2 P.C.BOARD	1	(RTL)
■ E32	VEP81215A	POWER INT P.C.BOARD	1	(RTL)
■ E33	VEP80792A	AUTO OFF LED P.C.BOARD	1	(RTL)
■ E34	VEP80790A	EJECT P.C.BOARD	1	(RTL)
■ E35	VEP80804A	ERROR LED P.C.BOARD	1	(RTL)
■ E36	VEP86300A	FRONT CONTROL1 P.C.BOARD	1	(RTL)
■ E37	VEP86301A	FRONT CONTROL2 P.C.BOARD	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E38	VEP86302A	FRONT SW P.C.BOARD	1	(RTL)
■ E39	VEP86306A	FRONT LED P.C.BOARD	1	(RTL)
■ E40	VEP86312A	MEM CARD CNCT P.C.BOARD	1	(RTL)
■ E41	VEP86305A	FRONT FUNCTION P.C.BOARD	1	(RTL)
■ E42	VEP86304A	FRONT MODE P.C.BOARD	1	(RTL)
■ E43	VEP86130B	FR HP VR P.C.BOARD	1	(RTL)
■ E44	VEP86317A	FR HP JACK P.C.BOARD	1	(RTL)
■ E45	VEP80653A	I/F (A) P.C.BOARD	1	(RTL)
■ E46	VEP80654A	I/F (B) P.C.BOARD	1	(RTL)
■ E47	VEP00E30B	CS-LP P.C.BOARD	1	(RTL)
■ E48	VEP00E25D	UNLOADING DETECT P.C.B.	1	(RTL)
■ E49	VEP80458B	CASSETTE DET SW P.C.BOARD	1	(RTL)
■ E50	VEP00E25E	SUB UNLOADING PHOTO P.C.B	1	(RTL)
■ E51	VEP00E28D	TR SENSOR P.C.BOARD	1	(RTL)
■ E52	VEP00E28E	SUB TR SENSOR P.C.BOARD	1	(RTL)
■ E53	VEP00P03D	LED SENSOR P.C.BOARD	1	(RTL)
■ E54	VEP80642A	DETECT BIT (R) P.C.BOARD	1	(RTL)
■ E55	VEP80655A	DETECT BIT (L) P.C.BOARD	1	(RTL)
■ E56	VEP80641A	SENSOR P.C.BOARD	1	(RTL)
■ E57	VEP80652A	LED P.C.BOARD	1	(RTL)
■ E58	VEP80661A	PHOTO TR P.C.BOARD	1	(RTL)
■ E59	VEP80661B	LED P.C.BOARD	1	(RTL)
■ E60	VEP00E04D	LOADING PHOTO P.C.BOARD	1	(RTL)
■ E61	VEP80644A	REEL I/F (S) P.C.BOARD	1	(RTL)
■ E62	VEP80645A	REEL I/R (T) P.C.BOARD	1	(RTL)
■ E63	VEP80640A	PHOTO P.C.BOARD	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP83563A	D5 REC PB P.C.BOARD	1	(RTL)	C4048	EEVHB1A330	E.CAPACITOR 10V 33U	1	
					C4049,50	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
					C4051,52	EEVHB1A330	E.CAPACITOR 10V 33U	2	
					C4053,54	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C3000-08	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9		C4055	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C3009	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C4056	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3010-12	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4057-63	EEVHB1A330	E.CAPACITOR 10V 33U	7	
C3013	EEVHP1H1R0	E.CAPACITOR 50V 1U	1		C4064,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3014-18	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5		C4066	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C3019,20	EEVHB1A330	E.CAPACITOR 10V 33U	2		C4067-69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C3021,22	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4070-72	EEVHB1A330	E.CAPACITOR 10V 33U	3	
C3023,24	EEVHB1A330	E.CAPACITOR 10V 33U	2		C4073	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3025-27	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4075	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3029-43	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	15		C4076-87	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	12	
C3045-49	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5		C4088	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C3051	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4089-91	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C3053	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4094	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3055-58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		C4096-98	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C3061-69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9		C4100,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3070	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1		C4102,03	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C3071	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		C4104-07	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C3072-90	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	19		C4108	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C3091,92	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2		C4109-12	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C3093-95	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4113	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C3100-06	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	7		C4114	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3107	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C4115	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3109-11	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4116-28	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	13	
C3112	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1		C4129	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3113-16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		C4130,31	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3117	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1		C4132,33	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C3118,19	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4134,35	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	2	
C3120-23	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4		C4136,37	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3126-35	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	10		C4139	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3136-39	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4		C4140,41	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3142-52	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	11		C4144-52	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9	
C3155	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4153,54	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3157-63	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	7		C4155,56	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C3167	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1		C4157,58	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	2	
C3168	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		C4160	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C3169	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4161,62	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3171,72	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4165	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3174,75	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4169-76	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C3177,78	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4178,79	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	2	
C3180-17	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	38		C4180,81	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C3218	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1		C4182-84	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	3	
C3219-35	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	17		C4185	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3236	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		C4186	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C3240,41	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4187	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C3243	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4188	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C3245-57	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	13		C4189	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4001-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4190	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4004-06	EEVHB1A330	E.CAPACITOR 10V 33U	3		C4191	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C4007-10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		C4219-33	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	15	
C4011-13	EEVHB1A330	E.CAPACITOR 10V 33U	3		C4256	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4014	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4258-60	EEVHB1A330	E.CAPACITOR 10V 33U	3	
C4015	EEVHB1A330	E.CAPACITOR 10V 33U	1		C4263	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C4016,17	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4275-91	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	17	
C4018-20	EEVHB1A330	E.CAPACITOR 10V 33U	3		C4292	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C4021	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4293	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C4022	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4294-01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C4023	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4302	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C4024	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4303	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C4025	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4304-22	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	19	
C4026,27	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C4323	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C4028	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4324,25	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C4029	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		C4326,27	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2	
C4030	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4328	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4031	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4330-34	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
C4032	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1		C4336-40	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
C4033	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		C4342	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4034	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C4700-07	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C4035,36	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2		C4708	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4037-43	EEVHB1A330	E.CAPACITOR 10V 33U	7		C4709-20	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	12	
C4044	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		C4800-05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
C4045-47	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		C4806-09	EEVHB1C100	E.CAPACITOR 16V 10U	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4810-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6		IC3060	TLCX125FT	IC	1	
C4818,19	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC3061,62	HM530281R20	IC	2	
C4822	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		IC3063	TC7W125FU	IC	1	
C4823	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1		IC3064	L7A1393	IC	1	C1AA00000221
C4824	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1		IC3065-67	D434008ALL15	IC	3	C3BBKC000036
C4825	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		IC3068	TLCX257FT	IC	1	
C4826-29	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		IC3069	LVX3245QSC	IC	1	
C4832,33	EEVHB1A330	E.CAPACITOR 10V 33U	2		IC3070	D67821GM022	IC	1	C1ZBZ0001590
C4834,35	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	2		IC3071	TLCX125FT	IC	1	
C4836-39	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		IC3072-75	TC7SH04FU	IC	4	
C4900-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		IC3076	TLCX74FT	IC	1	
C4904,05	EEVHB1C100	E.CAPACITOR 16V 10U	2		IC3077	TC7SH04FU	IC	1	
C4906-11	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6		IC3078,79	TLCX74FT	IC	2	
C4914	EEVHB1C100	E.CAPACITOR 16V 10U	1		IC3080	TC7SH32FU	IC	1	
C4915,16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC3081	TC7SH08FU	IC	1	
C4917	EEVHB1A330	E.CAPACITOR 10V 33U	1		IC3082,83	LVX3245QSC	IC	2	
C4918	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC3084	TLCX245FT	IC	1	
C4919	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1		IC3085	HM530281R20	IC	1	
C4920	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1		IC3086	LVX3245QSC	IC	1	
C4921	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC3087	HM530281R20	IC	1	
C4922	EEVHB1A330	E.CAPACITOR 10V 33U	1		IC3088	LVX3245QSC	IC	1	
C4924-26	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3		IC3089	HM530281R20	IC	1	
C4928	EEVHB1A330	E.CAPACITOR 10V 33U	1		IC3090	LVX3245QSC	IC	1	
C4929	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1		IC3091	HM530281R20	IC	1	
C4930	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		IC3092-94	D4564163A10B	IC	3	
C4931	ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1		IC3095	EPF10K50E203	IC	1	C1ZBZ0001222
C4940-43	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	4		IC3096	TC7SH04FU	IC	1	
C4944-60	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	17		IC3097,98	IDTLVC16374F	IC	2	
D3000,01	MA3J14300L	DIODE	2		IC3099	IDTLVC16245F	IC	1	
D4001-08	MA152A	DIODE	8		IC3100	TC7SH04FU	IC	1	
IC3000-02	DS90LV048A	IC	3		IC3101	TC7W32FU	IC	1	
IC3003	IDTLVC16245F	IC	1		IC3102,03	MB10HL116PF	IC	2	
IC3004,05	IDTLVC574APG	IC	2		IC3104	TLCX245FT	IC	1	
IC3006	TLCX125FT	IC	1		IC4001	LT1573CS8	IC	1	
IC3007	TC7SH32FU	IC	1		IC4002-05	NJM360M	IC	4	C0BBZB000001
IC3008	TC7S86FU	IC	1		IC4006	EPF10K50E143	IC	1	C1ZBZ0001230
IC3009	IDTLVC16374F	IC	1		IC4007	TC7SH04FU	IC	1	
IC3010	NJM062V	IC	1		IC4008	C0ABHA000020	IC	1	
IC3011	TC7S04FU	IC	1		IC4009,10	TC7SH04FU	IC	2	
IC3012	XC62FP5002P	IC	1		IC4011	TVHT244FT	IC	1	
IC3013	XC62DN5002P	IC	1		IC4012	C0ABHA000020	IC	1	
IC3015	TLCX541FT	IC	1		IC4013	MC74HC4046AF	IC	1	C0JBAZ000153
IC3016	IDTLVC16245F	IC	1		IC4015	TVHT244FT	IC	1	
IC3017	EPF10K50E203	IC	1	C1ZBZ0001222	IC4016	TLCX245FT	IC	1	
IC3018	IDTLVC16245F	IC	1		IC4017	MC74HC4046AF	IC	1	C0JBAZ000153
IC3019,20	IDT70V25L25F	IC	2		IC4018	TLCX245FT	IC	1	
IC3021	M66282F	IC	1		IC4019,20	MC74HC4046AF	IC	2	C0JBAZ000153
IC3022	TC7SH04FU	IC	1		IC4021	TLCX245FT	IC	1	
IC3023	M66282F	IC	1		IC4022	TVHT244FT	IC	1	
IC3024,25	IDTLVC16374F	IC	2		IC4023	TC75W54FU	IC	1	
IC3026	TC7S04FU	IC	1		IC4025	SN74LS628NS	IC	1	
IC3027	DS90CR218MTD	IC	1		IC4026	TC7SH04FU	IC	1	
IC3028,29	IDTLVC16374F	IC	2		IC4027	TLCX245FT	IC	1	
IC3030	C3ZBJ0000007	IC	1		IC4028	MB87D136APFV	IC	1	C1ZBZ0001517
IC3031	TLCX125FT	IC	1		IC4029	TVHT244FT	IC	1	
IC3032,33	C3ZBJ0000007	IC	2		IC4030	LT1129CS8	IC	1	
IC3034	TC7SH04FU	IC	1		IC4031	TVHC245FT	IC	1	
IC3035	C3ZBJ0000007	IC	1		IC4032	C3ZBJ0000007	IC	1	
IC3036	TC7W04FU	IC	1		IC4033	TVHC74FT	IC	1	
IC3039	TLCX04F	IC	1		IC4034,35	TLCX257FT	IC	2	
IC3040	C3ZBJ0000007	IC	1		IC4036	TVHT244FT	IC	1	
IC3041	TLCX541FT	IC	1		IC4037	MB87D136APFV	IC	1	C1ZBZ0001517
IC3042	LVX3245QSC	IC	1		IC4038	TVHT244FT	IC	1	
IC3043	C3ZBJ0000007	IC	1		IC4039	TVHC74FT	IC	1	
IC3044,45	LVX3245QSC	IC	2		IC4040	C1BB00000620	IC	1	
IC3046	C3ZBJ0000007	IC	1		IC4041	EPF10K50E203	IC	1	C1ZBZ0001222
IC3047	LVX3245QSC	IC	1		IC4042-44	C1BB00000620	IC	3	
IC3048	C3ZBJ0000007	IC	1		IC4045,46	TLCX245FT	IC	2	
IC3049	MB10HL124PFF	IC	1	C0JBZZ000215	IC4047	MN47V76SP	IC	1	
IC3050	TLCX240FT	IC	1		IC4048	LT1573CS8	IC	1	
IC3051	MB10HL124PFF	IC	1	C0JBZZ000215	IC4063,64	C3ZBJ0000007	IC	2	
IC3052	MC10EL57D	IC	1	C0JBZZ000113	IC4065	TLCX245FT	IC	1	
IC3053-55	MB10HL116PF	IC	3		IC4066	LVX3245QSC	IC	1	
					IC4067,68	C3ZBJ0000007	IC	2	
					IC4069,70	LVX3245QSC	IC	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4071-74	C3ZBJ0000007	IC	4		Q3003	2SK1748-Z	TRANSISTOR	1	
IC4098	TVHC244FT	IC	1		Q4001	2SB1202-S	TRANSISTOR	1	
IC4099	TVHT244FT	IC	1		Q4002,03	2SC3930	TRANSISTOR	2	
IC4100	EPC2TC32	IC	1		Q4004	2SA1532	TRANSISTOR	1	
IC4101	EPF10K10TC3	IC	1	C0JBAZ001101	Q4005	2SC3930	TRANSISTOR	1	
IC4102	EPC2TC32	IC	1		Q4006	2SA1532	TRANSISTOR	1	
IC4103	C0EBE0000073	IC	1		Q4007,08	2SC3930	TRANSISTOR	2	
IC4104	EPC2TC32	IC	1		Q4009	2SA1532	TRANSISTOR	1	
IC4105	M5256DFP70LL	IC	1	C3BBJC000001	Q4010	2SC3930	TRANSISTOR	1	
IC4106	MN53030VPR	IC	1		Q4011	2SA1532	TRANSISTOR	1	
IC4107	TC7SH04FU	IC	1		Q4012,13	2SC3930	TRANSISTOR	2	
IC4108	M5256DFP70LL	IC	1	C3BBJC000001	Q4014	2SA1532	TRANSISTOR	1	
IC4109	TMSD72274PH	IC	1		Q4015	2SC3930	TRANSISTOR	1	
IC4110	M5256DFP70LL	IC	1	C3BBJC000001	Q4016	2SA1532	TRANSISTOR	1	
IC4111	MN53030VPR	IC	1		Q4017,18	2SC3930	TRANSISTOR	2	
IC4112	TC7SH04FU	IC	1		Q4019	2SA1532	TRANSISTOR	1	
IC4113	M5256DFP70LL	IC	1	C3BBJC000001	Q4020	2SC3930	TRANSISTOR	1	
IC4114	TMSD72274PH	IC	1		Q4021	2SA1532	TRANSISTOR	1	
IC4115,16	C3BBHC000220	IC	2		Q4022,23	2SJ163-Q	TRANSISTOR	2	
IC4117	TLCX257FT	IC	1		Q4024-29	2SC2480	TRANSISTOR	6	
IC4118	UPD65949G076	IC	1		Q4030,31	2SJ163-Q	TRANSISTOR	2	
IC4119,20	C3BBHC000220	IC	2		Q4032-37	2SC2480	TRANSISTOR	6	
IC4121	UPD65949G076	IC	1		Q4038	2SB1202-S	TRANSISTOR	1	
IC4122-24	TVHT244FT	IC	3						
IC4125,26	TLCX245FT	IC	2		QR3000	UN5112	TRANSISTOR-RESISTOR	1	
IC4127,28	TC7SHU04FU	IC	2		QR3001-06	UN5212	TRANSISTOR-RESISTOR	6	
IC4129	EPF10K50E203	IC	1	C1ZBZ0001222	QR3007	UN5112	TRANSISTOR-RESISTOR	1	
IC4130-32	C1BB00000620	IC	3						
IC4133	MN47V76SP	IC	1		R3000-02	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
IC4134	TLCX257FT	IC	1		R3004,05	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC4135	C1BB00000620	IC	1		R3006	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4136	LT1086CM	IC	1	C0CBAYG00001	R3009	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4700,01	SN74S1053PW	IC	2		R3011	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4702,03	LVX3245QSC	IC	2		R3012-16	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
IC4704,05	TLCX245FT	IC	2		R3018-23	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	6	
IC4706	IDTLVC16245F	IC	1		R3024	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC4707	LVX3245QSC	IC	1		R3025	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
IC4708	TLCX245FT	IC	1		R3028	ERJ3RBD471	M.RESISTOR CH 1/16W 470	1	
IC4709	T163G26-1019	IC	1	C1ZBZ0001458	R3029-43	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	15	
IC4710	TLCX245FT	IC	1		R3044	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
IC4711,12	IDTLVC16245F	IC	2		R3045,46	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	2	
IC4800,01	TVHT244FT	IC	2		R3047	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
IC4802-05	MC74HC4046AF	IC	4	C0JBAZ000153	R3048	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
IC4806	TC75W54FU	IC	1		R3049	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
IC4807	NJM2904M	IC	1		R3050	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC4810	TC75W54FU	IC	1		R3051	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
IC4814-17	SN74LS628NS	IC	4		R3052	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC4819	TLCX245FT	IC	1		R3053,54	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
IC4900,01	TVHT244FT	IC	2		R3055-67	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	13	
IC4902-04	MC74HC4046AF	IC	3	C0JBAZ000153	R3068	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC4905	NJM2904M	IC	1		R3069-72	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	4	
IC4906	TC7SH04FU	IC	1		R3074-82	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	9	
IC4907	TC75W54FU	IC	1		R3083	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
IC4908	NJM2904M	IC	1		R3084,85	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
IC4911,12	SN74LS628NS	IC	2		R3086-03	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	18	
IC4913	TLCX245FT	IC	1		R3104-11	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	8	
IC4914	LT1129CS8	IC	1		R3116-39	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	24	
IC4920	TLCX245FT	IC	1		R3141	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
ID10	VVVS13698A	SOFTWARE	1		R3142,43	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
L3000,01	VLF1151A132	COIL	2		R3144,45	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
L3002,03	VLQ0319K100	COIL 10UH	2	G1C100K00023	R3146-65	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	20	
L4001-06	VLF1151A132	COIL	6		R3166	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
L4007-09	VLP0183	COIL	3	J0JKC0000007	R3167	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
L4010-15	VLQ0426J1R8	COIL 1.8UH	6	G1C1R8J00007	R3168-71	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
L4016	VLF1151A132	COIL	1		R3172-78	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	7	
P3101	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006	R3179	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
P3201	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006	R3180,81	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
P4001,02	VJP3510	CONNECTOR (MALE)	2	K1KAC8B00004	R3182	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
P4003,04	VJP3887A080	CONNECTOR (MALE)	2	K1KA80A00067	R3183-86	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4	
P4005	VJP3125B008	CONNECTOR (MALE)	1		R3187	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
Q3000-02	2SJ278	TRANSISTOR	3		R3188,89	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
					R3190	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
					R3191,92	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
					R3193	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
					R3194	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4601-04	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	4		VR4800-03	VRV0113B103	V.RESISTOR 10K	4	
R4700-04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	5		VR4900,01	VRV0113B103	V.RESISTOR 10K	2	
R4705-16	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12						
R4717-19	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3		X3000	VSX0670	CRYSTAL OSCILLATOR	1	H1C3605A0002
R4720-27	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	8		X3001	H1C1156B0001	CRYSTAL OSCILLATOR	1	
R4728-35	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8		X3002	H1C1196B0001	CRYSTAL OSCILLATOR	1	
R4736-63	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	28		X3003	H1C1436B0001	CRYSTAL OSCILLATOR	1	
R4764,65	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		X3004	VSX0599	CRYSTAL OSCILLATOR	1	H1A1336A0001
R4800,01	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		X4001-07	VSX1088	CRYSTAL OSCILLATOR	7	
R4802-09	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	8		X4008,09	VSX0453	CRYSTAL OSCILLATOR	2	H0D400500001
R4810-17	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8		X4010	VSX0519	CRYSTAL OSCILLATOR	1	H0D160500011
R4818,19	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2		X4900	VSX1066	CRYSTAL OSCILLATOR	1	H4G1175A0001
R4824,25	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2						
R4828-31	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4				MISCELLANEOUS		
R4834-41	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	8						
R4842-45	ERJ6RBD471	M.RESISTOR CH 1/10W 470	4			VML2143	CARD PULLER	1	
R4846-49	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4			VML2144	CARD PULLER	1	
R4850,51	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2			VMP6526	SUPPORT ANGLE	2	
R4852-54	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	3			XNG26EFS	NUT	4	
R4855	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1			XYN26+C12	SCREW	4	
R4898	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1			VMZ3138	INSULATION SHEET	1	
R4900	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1			VHN0338	NYLON RIVET	6	
R4901-04	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4			VEE0M03	L1 SUB CABLE	1	
R4905	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1						
R4906,07	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2						
R4908-11	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4						
R4914,15	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2						
R4916	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1						
R4917	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		■ E2	VEP84373B	PCM PB SUB P.C.BOARD	1	(RTL)
R4918,19	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2						
R4922-25	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	4						
R4926	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		C4001-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R4927,28	ERJ6RBD471	M.RESISTOR CH 1/10W 470	2		C4005-09	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
R4929,30	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		C4024-26	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R4931	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C4030-39	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	10	
R4932	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C4044	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R4933-36	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4		C4045	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
R4937	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		C4046	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
R4938	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		C4047,48	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R4940	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		C4054	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R4941	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C4055	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
R4942-45	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		C4056	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
R4950,51	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		C4057,58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R4952	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C4060	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R4953	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C4500-05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
R4954-57	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	4		C4509,10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R4958	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1						
R4959-64	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	6		IC4001,02	TVHT244FT	IC	2	
R4965	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4003	C1AB00001423	IC	1	
R4966-69	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4011-13	D434008ALL15	IC	3	C3BBKC000036
R4970	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4017	TVHT244FT	IC	1	
R4971-74	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4018	EPF10K20TC-4	IC	1	C1ZBZ0001281
R4975	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4019	EPC2TC32	IC	1	
R4976-79	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4020	S80745AND9	IC	1	
R4980	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4021	TVHT244FT	IC	1	
R4981-84	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4022	M5256DFP70LL	IC	1	C3BBJC000001
R4985	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4026	TMSD72274PH	IC	1	
R4986-89	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4031	TMSD72274PH	IC	1	
R4990	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4032	TVHT244FT	IC	1	
R4991-94	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4		IC4500-05	TLCX245FT	IC	6	
R4995	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		IC4506,07	TVHT244FT	IC	2	
R4996-99	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	4						
					ID10	VVVS13643	SOFTWARE	1	
TG4001-12	EYF6CU	TEST POINT	12						
					L4001,02	VLQ0426J1R8	COIL 1.8UH	2	G1C1R8J00007
TP3000-18	EYF6CU	TEST POINT	19						
TP4018-36	EYF6CU	TEST POINT	19		P4001	VJS3886A080	CONNECTOR (FEMALE)	1	K1K80A00060
TP4047-50	EYF6CU	TEST POINT	4		P4003	VJP3125B008	CONNECTOR (MALE)	1	
TP4062-67	EYF6CU	TEST POINT	6						
TP4075	EYF6CU	TEST POINT	1		R4001,02	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
TP4080-83	EYF6CU	TEST POINT	4		R4004	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
TP4800-11	EYF6CU	TEST POINT	12		R4077	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
TP4900-08	EYF6CU	TEST POINT	9		R4078	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R4079	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
					R4080	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
VR4001	VRV0113B103	V.RESISTOR 10K	1						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4081,82	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2						
R4083	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4001,02	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R4084	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4004	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4085	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4077	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4088	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4078	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4089	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4079	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R4509	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R4080	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4510-17	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8		R4081,82	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R4519,20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2		R4083	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4521-29	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	9		R4084	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4530,31	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R4085	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4532	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4088	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4533	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R4089	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4534	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R4500	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R4535	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R4502-06	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
					R4509	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
TG4500	EYF6CU	TEST POINT	1		R4510-16	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	7	
					R4518	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
TP4002	EYF6CU	TEST POINT	1		R4519,20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
TP4004	EYF6CU	TEST POINT	1		R4521-29	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	9	
TP4009,10	EYF6CU	TEST POINT	2		R4530,31	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
TP4501	EYF6CU	TEST POINT	1		R4532	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
TP4505,06	EYF6CU	TEST POINT	2		R4533	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
					R4534	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
X4001,02	VSX0453	CRYSTAL OSCILLATOR	2	H0D400500001	R4535	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
		MISCELLANEOUS			TG4500	EYF6CU	TEST POINT	1	
	XYN26+K5	SCREW	4		TP4002	EYF6CU	TEST POINT	1	
	VMS6082	SPACER	4		TP4004	EYF6CU	TEST POINT	1	
					TP4009,10	EYF6CU	TEST POINT	2	
					TP4501	EYF6CU	TEST POINT	1	
					TP4505,06	EYF6CU	TEST POINT	2	
■ E3	VEP84373A	PCM PB SUB P.C.BOARD	1	(RTL)	X4001,02	VSX0453	CRYSTAL OSCILLATOR	2	H0D400500001
							MISCELLANEOUS		
						XYN26+K5	SCREW	4	
C4001-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3			VMS6082	SPACER	4	
C4005-09	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5						
C4024-26	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3						
C4030-39	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	10						
C4044	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1						
C4045	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1						
C4046	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1						
C4047,48	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		■ E4	VEP83529A	REC SUB P.C.BOARD	1	(RTL)
C4054	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1						
C4055	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1						
C4056	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1						
C4057,58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C1-C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6	
C4060	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C7	EEVHB0J330	E.CAPACITOR 6.3V 33U	1	
C4500-05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6		C8,C9	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C4509,10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C10	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
					C11	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
					C13,14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
IC4001,02	TVHT244FT	IC	2		C15	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
IC4003	C1AB00001423	IC	1		C16	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
IC4011-13	D434008ALL15	IC	3	C3BBKC000036	C17	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
IC4017	TVHT244FT	IC	1		C18,19	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
IC4018	EPF10K20TC-4	IC	1	C1ZBZ0001281	C100,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
IC4019	EPC2TC32	IC	1		C103-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	13	
IC4020	S80745AND9	IC	1		C200-07	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	8	
IC4021	TVHT244FT	IC	1		C208-23	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
IC4022	M5256DFP70LL	IC	1	C3BBJC000001	C600-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
IC4026	TMSD72274PH	IC	1		C606-09	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
IC4031	TMSD72274PH	IC	1		C610	EEVHB1C100	E.CAPACITOR 16V 10U	1	
IC4032	TVHT244FT	IC	1		C611-25	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	15	
IC4500-05	TLCX245FT	IC	6						
IC4506,07	TVHT244FT	IC	2		D100,01	LN1251CAL	DIODE	2	
ID10	VVVS13608	SOFTWARE	1		IC1	LT1086CM	IC	1	C0CBAYG00001
					IC3	LT1573CS8	IC	1	
L4001,02	VLQ0426J1R8	COIL 1.8UH	2	G1C1R8J00007	IC101	S80727ANDQ	IC	1	
					IC102	TVHC244FT	IC	1	
P4001	VJS3886A080	CONNECTOR (FEMALE)	1	K1KB80A00060	IC104	MB29LV160T80	IC	1	
P4003	VJP3125B008	CONNECTOR (MALE)	1		IC108,09	TC7S14FTE85L	IC	2	C0JBAZ0000514

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC200	XCV1KE6B560	IC	1		R288	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC600-03	D434008ALL15	IC	4	C3BBKC000036	R290	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC605	IDT388915TOP	IC	1		R293,94	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IC607	MC10H116M	IC	1	C0JBZZ000018	R296	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R298	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
ID10	VVVS13452	SOFTWARE	1		R300	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
ID20	VVVS13453	SOFTWARE	1		R302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R305,06	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IP100	X9144L7T144	IC	1		R310	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R314	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
L1	VLP0192	COIL	1		R319,20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
L3	VLF1151A132	COIL	1		R322-30	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	9	
L200	VLP0328A102	FERRITE CORE	1		R332	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R335,36	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
P1	VJP4064N160C	CONNECTOR (MALE)	1	K1KBG0A00006	R338	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
P2	VJP3125B010	CONNECTOR (MALE)	1		R340	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
P100,01	VJP3125B008	CONNECTOR (MALE)	2		R342-02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	161	
					R600,01	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
Q1	2SB1202-S	TRANSISTOR	1		R602	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
					R603,04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
QR100,01	UN2214	TRANSISTOR-RESISTOR	2	UNR221400L	R605	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1	
					R606-08	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R9-16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8		R609	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R17	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1		R610-13	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R18	ERJ6RED470	M.RESISTOR CH 1/10W 47	1		R614-29	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	16	
R20	ERJ6RED750	M.RESISTOR CH 1/10W 75	1		R800	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R23	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1		R801,02	ERDS2TJ471	C.RESISTOR 1/4W 470	2	
R24	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1		R803-06	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	4	
R25,26	ERJ3RBD471	M.RESISTOR CH 1/16W 470	2						
R27	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1		SW100	VSS0367-04B	SWITCH	1	
R28	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1		SW101	VSP1005	SWITCH	1	K0H1BA000148
R29	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1						
R30	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		TG1-G4	EYF6CU	TEST POINT	4	
R31	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1						
R32	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1		TP100-17	EYF6CU	TEST POINT	18	
R33	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1		TP277-82	EYF6CU	TEST POINT	6	
R34	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1		TP284,85	EYF6CU	TEST POINT	2	
R100	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		TP306-12	EYF6CU	TEST POINT	7	
R101	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		TP600-06	EYF6CU	TEST POINT	7	
R104	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		TP700-04	EYF6CU	TEST POINT	5	
R108-10	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	3		TP781-84	EYF6CU	TEST POINT	4	
R113	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1						
R116	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1				MISCELLANEOUS		
R117	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R118	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1						
R119	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1			XYN3+K6	SCREW	4	
R121	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1			VMS4950	P.C.B. POST	4	
R122	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1						
R123	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R124	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1						
R125	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R126	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		■ E5	VEP83530A	PB SUB P.C.BOARD	1	(RTL)
R127	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1						
R128	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1						
R129-31	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3						
R133	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C1,C2	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R134-37	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	4		C3	EEVHB0J330	E.CAPACITOR 6.3V 33U	1	
R138	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C4	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R139	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		C5	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R140-48	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	9		C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R149	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C7	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
R151,52	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C8	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R156	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C9	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
R158,59	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C100,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R161	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C103-16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	14	
R162,63	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		C200-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
R217-23	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	7		C600-15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
R224	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C800	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R225-65	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	41						
R266,67	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		D100,01	LN1251CAL	DIODE	2	
R268-70	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3		D200-16	LN1251CAL	DIODE	17	
R272-76	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5		D600-16	LN1251CAL	DIODE	17	
R278-80	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3						
R282	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		IC1	LT1086CM	IC	1	C0CBAYG00001
R285,86	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		IC2	LT1573CS8	IC	1	
					IC101	S80727ANDQ	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC102	TVHC244FT	IC	1						
IC104	MB29LV160T80	IC	1		SW100	VSS0367-04B	SWITCH	1	
IC109,10	TC7S14FTE85L	IC	2	C0JBZ000514	SW101	VSP1005	SWITCH	1	K0H1BA000148
IC200	XCV1KE6B560	IC	1		SW200	VSS0342	SWITCH	1	K0D112B00056
IC600	XCV1KE6B560	IC	1						
					TG1-G4	EYF6CU	TEST POINT	4	
ID10	VVVS13454	SOFTWARE	1						
ID20	VVVS13455	SOFTWARE	1		TP100-17	EYF6CU	TEST POINT	18	
					TP200	EYF6CU	TEST POINT	1	
IP100	X9144L7T144	IC	1		TP509-16	EYF6CU	TEST POINT	8	
					TP917-22	EYF6CU	TEST POINT	6	
L1	VLP0192	COIL	1				MISCELLANEOUS		
P1	VJP4064N160C	CONNECTOR (MALE)	1	K1KBG0A00006					
P100,01	VJP3125B008	CONNECTOR (MALE)	2			XYN3+K6	SCREW	4	
						VMS4950	P.C.B. POST	4	
Q1	2SB1202-S	TRANSISTOR	1						
QR100,01	UN2214	TRANSISTOR-RESISTOR	2	UNR221400L					
R1	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1						
R2	ERJ6RED470	M.RESISTOR CH 1/10W 47	1		■ E6	VEP83503A	PB PROC P.C.BOARD	1	(RTL)
R3	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1		■	VEP83552A	L2 GATE P.C.BOARD	1	(RTL)FOR VEP83503A
R4	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1		■	VEP83575A	CLK DRV P.C.BOARD	1	(RTL)FOR VEP83503A
R5	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1						
R6	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1						
R7	ERJ6RBD102	M.RESISTOR CH 1/16W 1K	1						
R8	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		C1	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83552A
R100	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C1	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R101	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C2	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R102-04	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3		C3	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R108-10	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	3		C3	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R113	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C4	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	FOR VEP83575A
R116	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C4	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R117	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C5	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R118	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		C5	EEVHB1A330	E.CAPACITOR 10V 33U	1	FOR VEP83575A
R119	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C6	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R120	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C7	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R121	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C7	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R122	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		C8	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	FOR VEP83575A
R123	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C8	EEVHB1A330	E.CAPACITOR 10V 33U	1	
R124	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C9-13	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
R125	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C14-18	EEVHB1A330	E.CAPACITOR 10V 33U	5	
R126	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		C19,20	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R127	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C21,22	EEVHB1A330	E.CAPACITOR 10V 33U	2	
R128	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		C23-25	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R129-31	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3		C26,27	EEVHB1A330	E.CAPACITOR 10V 33U	2	
R133	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C28	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R134-37	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	4		C29	VCEA1CAP330	C.CAPACITOR 16V 33U	1	
R138	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		C30-45	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	16	
R139	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		C46	ECA1CEN470	E.CAPACITOR 16V 47P	1	
R140-51	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	12		C47,48	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R152	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		C49,50	EEVHB1A330	E.CAPACITOR 10V 33U	2	
R156	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C51	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
R158,59	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C52	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R162,63	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2		C53	EEVHP1H1R0	E.CAPACITOR 50V 1U	1	
R164	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C54	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R165,66	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		C55	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
R200	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C56	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
R201	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C57,58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
R202,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C59	ECA1CEN470	E.CAPACITOR 16V 47P	1	
R204,05	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		C60	EEVHP1H1R0	E.CAPACITOR 50V 1U	1	
R206-88	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	83		C61	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R289	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		C62	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
R290-06	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	17		C63-67	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
R600	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C68	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
R601	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C69	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
R602,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C70,71	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
R604,05	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		C72-74	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R606,07	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C75	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
R608	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		C76-78	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
R609-75	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	67		C79	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
R678,79	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C80	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
R680-96	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	17		C81	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
R800	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1		C82-87	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
					C88,89	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C502-04	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	3		IC51	C1ZB20001644	IC	1	
C505-32	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	28		IC52	TLCX125FT	IC	1	
C533	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		IC53-55	IDTLVC16245F	IC	3	
C534,35	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC56	TC7W32FU	IC	1	
C536	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		IC57,58	TLCX125FT	IC	2	
C537	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		IC59	TLCX245FT	IC	1	
C538	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1		IC60	TLCX125FT	IC	1	
C539	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1		IC61	DS90LV047A	IC	1	
C540,41	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		IC62	TC7W32FU	IC	1	
C542	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	1		IC63	TLCX125FT	IC	1	
C543-51	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9		IC64	TC7W125FU	IC	1	
C552,53	EEVHB0J330	E.CAPACITOR 6.3V 33U	2		IC65	TC7SH08FU	IC	1	
C554-57	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4		IC66	XC62FP5002P	IC	1	
C558,59	EEVHB0J330	E.CAPACITOR 6.3V 33U	2		IC67	XC62FP3302P	IC	1	
C560-89	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	30		IC68	TLCX125FT	IC	1	
					IC69	TC7W53F	IC	1	
D1,D2	MA142K	DIODE	2		IC70	TLCX125FT	IC	1	
D3	MA3J14300L	DIODE	1		IC71	NJM082BM	IC	1	C0ABEB000017
D4	MA142K	DIODE	1		IC72	TC7W53F	IC	1	
D5	MA3J14300L	DIODE	1		IC73	NE521D	IC	1	C0BBBB000013
D6	MA142K	DIODE	1		IC74	XC62FP3302P	IC	1	
D10	MA3J14300L	DIODE	1		IC75	TC7W53F	IC	1	
D14-16	MA3J14300L	DIODE	3		IC76	C0JBAB0001544	IC	1	
D17	MA142K	DIODE	1		IC77	GS4981-C	IC	1	
D18	MA3J14300L	DIODE	1		IC78	TC7W00FU	IC	1	
					IC79,80	TLCX125FT	IC	2	
FL1-11	EZAST33AAA	FILTER	11		IC81	TLCX04F	IC	1	
					IC82	TLCX125FT	IC	1	
IC1	TLCX125FT	IC	1		IC83	TVHT08FT	IC	1	
IC1	TVHT08F	IC	1	FOR VEP83552A	IC84	XC62FP5002P	IC	1	
IC1	XC62FP3302P	IC	1	FOR VEP83575A	IC85	TLCX125FT	IC	1	
IC2	IDT388915TOP	IC	1	FOR VEP83575A	IC86	XC62FP3302P	IC	1	
IC2	LT1129CS8	IC	1		IC87	TC7W125FU	IC	1	
IC3	LT1175CS8	IC	1		IC88	TC7SH08FU	IC	1	
IC4	TLCX125FT	IC	1		IC89	TC7W53F	IC	1	
IC5-C7	EPC2TC32	IC	3		IC90	NJM082BM	IC	1	C0ABEB000017
IC8	C0EBE0000073	IC	1		IC91	TVHC123FT	IC	1	
IC9	SN74S1053NS	IC	1		IC92	C0JBAB0001544	IC	1	
IC10	SN74S1051NS	IC	1		IC93	TLCX240FT	IC	1	
IC11,12	IDTLVC16245F	IC	2		IC94	TLCX245FT	IC	1	
IC13	TC7W32FU	IC	1		IC95	TLCX244FT	IC	1	
IC14	C0JBAB000196	IC	1		IC96	TVHC221FT	IC	1	
IC15	EP3256A1410	IC	1		IC97	IDT388915TOP	IC	1	
IC16	C0JBAB000196	IC	1		IC98,99	TLCX125FT	IC	2	
IC17	AN91A12S	IC	1		IC100,01	DS90LV047A	IC	2	
IC18	CLC505AJE	IC	1	C0ABAB000024	IC102	TVHT08FT	IC	1	
IC19	GS4981-C	IC	1		IC103	TC7W125FU	IC	1	
IC20	TC7W53F	IC	1		IC104,05	TLCX125FT	IC	2	
IC21	TC7W00FU	IC	1		IC106	IDTLVC16245F	IC	1	
IC22	NE521D	IC	1	C0BBBB000013	IC107	NJM082BM	IC	1	C0ABEB000017
IC23	TVHC123FT	IC	1		IC108	AD7390AR	IC	1	
IC24	TVHC221FT	IC	1		IC109,10	NJM082BM	IC	2	C0ABEB000017
IC25	UPD65650J203	IC	1	C1ZBZ0001380	IC111	XC62FP5002P	IC	1	
IC26	TVHC221FT	IC	1		IC112	TC7W53F	IC	1	
IC27	TVHC08FT	IC	1		IC113-15	TLCX125FT	IC	3	
IC28	TVHC221FT	IC	1		IC116	IDTLVC16245F	IC	1	
IC29	C0JBAB000196	IC	1		IC117,18	LT1129CS8	IC	2	
IC30	TC7W125FU	IC	1		IC119	ADV7171KS	IC	1	C0ZBZ0000175
IC31	NJM082BM	IC	1	C0ABEB000017	IC120	ADV7128KR80	IC	1	
IC32	TVHC221FT	IC	1		IC121	AD589JR	IC	1	
IC33,34	XC62GR5022P	IC	2		IC122	NE521D	IC	1	C0BBBB000013
IC35	THC4053FT	IC	1		IC123,24	AD818AR	IC	2	
IC36	TVHC221FT	IC	1		IC125	DS90LV048A	IC	1	
IC37	NJM082BM	IC	1	C0ABEB000017	IC126	TLCX125FT	IC	1	
IC38	TVHC221FT	IC	1		IC127	IDT70V27L25P	IC	1	
IC39	TVHC257FT	IC	1		IC128-30	IDTLVC16374F	IC	3	
IC40	TC7W53F	IC	1		IC131	DS92LV1021TM	IC	1	
IC41	NJM082BM	IC	1	C0ABEB000017	IC132	IDTLVC16245F	IC	1	
IC42,43	TVHC125FT	IC	2		IC133	C1AB00001377	IC	1	
IC44	LT1573CS8	IC	1		IC134,35	IDTLVC16245F	IC	2	
IC45	TVHT04FT	IC	1		IC136	C1AB00001377	IC	1	
IC46	TLCX244FT	IC	1		IC137	IDTLVC16245F	IC	1	
IC47,48	DS90LV048A	IC	2		IC138	UPD83012G002	IC	1	
IC49	XC62FP3302P	IC	1		IC139	TC7SH32FU	IC	1	
IC50	TLCX125FT	IC	1		IC140,41	D4564163A10B	IC	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC142,43	C3BBKG000044	IC	2		L18	VLQ0319K100	COIL 10UH	1	G1C100K00023
IC144	UPD65840GY07	IC	1	C1ZBZ0001393	L19	VLQ0163J470	COIL 47UH	1	
IC145	C3ZBJ0000007	IC	1		L20-22	VLQ0319K100	COIL 10UH	3	G1C100K00023
IC146	UPD83012G002	IC	1		L23	VLQ0163J470	COIL 47UH	1	
IC147,48	D4564163A10B	IC	2		L24	VLQ0163J220	COIL 22UH	1	
IC149,50	C3BBKG000044	IC	2		L25	VLQ0163J470	COIL 47UH	1	
IC151	UPD65840GY07	IC	1	C1ZBZ0001393	L26	VLQ0319K1R0	COIL 1.0UH	1	
IC152	C3ZBJ0000007	IC	1		L27	VLQ0163J2R7	COIL 2.7UH	1	G1C2R7J00002
IC153	UPD83012G002	IC	1		L28	VLQ0163JR68	COIL 0.68UH	1	G1CR68J00004
IC154,55	D4564163A10B	IC	2		L29-32	VLQ0319K1R0	COIL 1.0UH	4	
IC156,57	C3BBKG000044	IC	2		L33-35	VLQ0163J470	COIL 47UH	3	
IC158	UPD65840GY07	IC	1	C1ZBZ0001393	L36	VLP0183	COIL	1	J0JKC0000007
IC159	C3ZBJ0000007	IC	1		L37	VLQ0163J470	COIL 47UH	1	
IC160	UPD83012G002	IC	1						
IC161,62	D4564163A10B	IC	2		P1,P2	VJP3510	CONNECTOR (MALE)	2	K1KAC8B00004
IC163,64	C3BBKG000044	IC	2		P3	VJP3125B008	CONNECTOR (MALE)	1	
IC165	UPD65840GY07	IC	1	C1ZBZ0001393	P4	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006
IC166	C3ZBJ0000007	IC	1		P5	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
IC167,68	IDTLVC16374F	IC	2						
IC169-71	IDTLVC16245F	IC	3		Q1	2SB1202-S	TRANSISTOR	1	
IC172	IDTLVC16374F	IC	1		Q2,Q3	2SJ278	TRANSISTOR	2	
IC173-81	IDTLVC16245F	IC	9		Q4,Q5	XN4601	TRANSISTOR-RESISTOR	2	
IC182,83	VY06629	IC	2	C1ZBZ0000165	Q6,Q7	2SD601A-R	TRANSISTOR	2	
IC184	D4564163A10B	IC	1		Q8	2SB1202-S	TRANSISTOR	1	
IC185	C1ZBZ0001644	IC	1		Q10	2SB1202-S	TRANSISTOR	1	
IC186	IDTLVC16245F	IC	1						
IC187	LT1573CS8	IC	1		QR1,R2	UN5212	TRANSISTOR-RESISTOR	2	
IC188	D4564163A10B	IC	1						
IC189	IDTLVC16245F	IC	1		R1	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP83552A
IC190	D4564163A10B	IC	1		R1	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC191,92	C1ZBZ0001644	IC	2		R1	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	FOR VEP83575A
IC193	IDTLVC16245F	IC	1		R2	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP83552A
IC194	D4564163A10B	IC	1		R2	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC195,96	TC7W32FU	IC	2		R2	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	FOR VEP83575A
IC197	TLCX125FT	IC	1		R3	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP83552A
IC198	C0JBA0000196	IC	1		R3	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC199	IDTLVC16245F	IC	1		R3	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	FOR VEP83575A
IC200	TLCX125FT	IC	1		R6	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
IC202,03	IDTLVC16245F	IC	2		R7	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC204	XC62FP3302P	IC	1		R8	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
IC205,06	DS90LV047A	IC	2		R9	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC207	TLCX125FT	IC	1		R10-12	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
IC208	UPD82277N003	IC	1		R13	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC209	TLCX245FT	IC	1		R14-16	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
IC210-21	D4564163A10B	IC	12		R18	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC222-25	D4564441A10	IC	4		R19	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
IC226	DS90LV048A	IC	1		R22,23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
IC227	C1ZBZ0001644	IC	1		R24	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
IC228	LT1573CS8	IC	1		R25,26	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
IC229,30	IDTLVC16374F	IC	2		R27,28	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC231,32	M66282F	IC	2		R29-31	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
IC233,34	DS90CR217MTD	IC	2		R32-35	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
IC235-38	TC7SH32FU	IC	4		R36	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
IC239	TC7W00FU	IC	1		R38-42	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
IC240,41	M66282F	IC	2		R44-68	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	25	
IC242	TC7W00FU	IC	1		R69,70	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
IC243	TLCX125FT	IC	1		R71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC244	TC7W32FU	IC	1		R72-74	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
IC245-47	TLCX125FT	IC	3		R76,77	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
IC248-50	TC7W32FU	IC	3		R78	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC251	TLCX125FT	IC	1		R79-83	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
					R85	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
ID10	VVVS13624I	SOFTWARE	1		R86	ERJ3RED224	M.RESISTOR CH 1/16W 220K	1	
					R87	ERJ3RED684	M.RESISTOR CH 1/16W 680K	1	
L1	VLF1151A132	COIL	1		R88	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
L2-L4	VLP0183	COIL	3	J0JKC0000007	R89	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
L5-L7	VLF1151A132	COIL	3		R90,91	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	2	
L8,L9	VLQ0319K470	COIL 47UH	2	G1C470K00013	R92	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
L10	VLQ0319K221	COIL 220UH	1	G1C221K00010	R93	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
L11	VLQ0163J390	COIL 39UH	1		R95	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
L12	VLQ0163J680	COIL 68UH	1		R96	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
L13	VLQ0163J221	COIL 220UH	1	G1C221J00003	R97	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	1	
L14	VLP0183	COIL	1	J0JKC0000007	R98,99	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
L15	VLQ0163J470	COIL 47UH	1		R100	ERJ3RED154	M.RESISTOR CH 1/16W 150K	1	
L16,17	VLP0183	COIL	2	J0JKC0000007	R101	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R442,43	ERJ3RBD471	M.RESISTOR CH 1/16W 470	2		R626	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R444	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1		R627	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R445	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R628-30	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R446	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1		R631-42	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12	
R447	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1		R643,44	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R448,49	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2		R655	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R450,51	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2		R656-58	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R452,53	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2		R659-68	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	10	
R454	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1		R669-76	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8	
R455,56	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2		R677	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R457	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1		R678,79	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R459	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R680-83	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R460	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R684-97	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R461	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1		R698	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R462	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1		R699-07	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	9	
R463,64	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R465	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R709,10	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R466	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1		R711-14	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R467	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		R715-28	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R468	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1		R729	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R469	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		R730-34	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	5	
R470-80	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	11		R736	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R481-88	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	8		R738	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R489	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1		R739	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R490-92	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3		R740,41	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R493	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		R742-45	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R494	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R746-59	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R495,96	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		R760	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R497,98	ERJ3RED750	M.RESISTOR CH 1/16W 75	2		R761	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R499	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1		R763	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R500	ERJ3RED750	M.RESISTOR CH 1/16W 75	1		R765-67	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R501	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1		R768	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R502	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		R769	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R503	ERJ3RBD511	M.RESISTOR CH 1/16W 510	1		R770	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R504	ERJ3GEYJ750	M.RESISTOR CH 1/16W 75	1		R771,72	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R505,06	ERJ3RED750	M.RESISTOR CH 1/16W 75	2		R773-76	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R507	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1		R777-90	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	14	
R508	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1		R791	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R509	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1		R792,93	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R510	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		R794-33	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R511	ERJ3RED750	M.RESISTOR CH 1/16W 75	1		R834	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R512	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1		R835-74	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R514	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1		R875	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R515	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1		R876-15	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R516,17	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R916	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R518	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		R917-56	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R519	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1		R957	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R520	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1		R958-99	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	42	
R521	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1		R1001,02	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R522	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1		R1003-42	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	40	
R524	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1		R1043-48	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6	
R525	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1		R1049	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R526	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1		R1050	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R527	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1		R1054	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R528,29	ERJ3RBD151	M.RESISTOR CH 1/16W 150	2		R1055-57	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R530	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1		R1058,59	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2	
R531	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1		R1060,61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R532,33	ERJ3RBD151	M.RESISTOR CH 1/16W 150	2		R1062	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R534	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R1064-75	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12	
R538-41	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4		R1076	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R546	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R1077	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
R547,48	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R1078	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1	
R550	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R1079	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R551,52	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R1080	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1	
R553,54	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R1081	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1	
R555	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R1082	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1	
R556,57	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		R1083	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R560-63	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4		R1084-89	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6	
R564	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		R1090	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R565-78	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	14		R1091	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R579-82	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4		R1092-01	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	10	
R583	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		R1102-07	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6	
R584	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R1108	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R586-10	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	25		R1109	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R614,15	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R1110	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1114-16	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3		R1547	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1117,18	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2		R1548	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1120	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1						
R1123,24	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		TG1-12	EYF6CU	TEST POINT	12	
R1125,26	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2						
R1127-38	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12		TP1	EYF6CU	TEST POINT	1	
R1139	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		TP5-12	EYF6CU	TEST POINT	8	
R1140-45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6		TP14	EYF6CU	TEST POINT	1	
R1146	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		TP17-22	EYF6CU	TEST POINT	6	
R1147	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		TP25-37	EYF6CU	TEST POINT	13	
R1148-57	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	10		TP64-56	EYF6CU	TEST POINT	3	
R1158	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		TP58-66	EYF6CU	TEST POINT	9	
R1159-69	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	11		TP68-71	EYF6CU	TEST POINT	4	
R1170	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		TP73	EYF6CU	TEST POINT	1	
R1171	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		TP75-77	EYF6CU	TEST POINT	3	
R1173-79	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	7		TP79	EYF6CU	TEST POINT	1	
R1180	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		TP83-90	EYF6CU	TEST POINT	8	
R1181,82	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		TP105-07	EYF6CU	TEST POINT	3	
R1183,84	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		TP123-25	EYF6CU	TEST POINT	3	
R1185,86	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		TP127,28	EYF6CU	TEST POINT	2	
R1187	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		TP132-37	EYF6CU	TEST POINT	6	
R1189	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		TP140-42	EYF6CU	TEST POINT	3	
R1190-11	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	22		TP152-55	EYF6CU	TEST POINT	4	
R1212,13	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2		TP157-62	EYF6CU	TEST POINT	6	
R1214	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1						
R1215-18	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4		VR1	VRV0113B503	V.RESISTOR 50K	1	D3EC45030002
R1222,23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2		VR2,R3	VRV0113B502	V.RESISTOR 5K	2	D3EC45020002
R1226-08	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	83		VR4,R5	VRV0113B503	V.RESISTOR 50K	2	D3EC45030002
R1309	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		VR6,R7	VRV0113B103	V.RESISTOR 10K	2	
R1320,21	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	2		VR8-10	VRV0113B502	V.RESISTOR 5K	3	D3EC45020002
R1322,23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2		VR11	VRV0113B503	V.RESISTOR 50K	1	D3EC45030002
R1324-27	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4		VR12-14	VRV0113B502	V.RESISTOR 5K	3	D3EC45020002
R1332	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		VR16-18	VRV0113B502	V.RESISTOR 5K	3	D3EC45020002
R1333	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		VR19,20	VRV0113B101	V.RESISTOR 100	2	
R1334	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		VR21,22	VRV0113B102	V.RESISTOR 1K	2	D3EC41020001
R1336	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1						
R1338	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		X1	VSX0688	CRYSTAL OSCILLATOR	1	H1C1435B0001
R1342	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		X2	VSX0689	CRYSTAL OSCILLATOR	1	H1C1775B0002
R1343	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		X3	VSX0677	CRYSTAL OSCILLATOR	1	H1C1355B0002
R1345	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		X4	H1C7425B0001	CRYSTAL OSCILLATOR	1	
R1346	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		X5	H1C7415B0001	CRYSTAL OSCILLATOR	1	
R1347	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		X6	VSX0907	CRYSTAL OSCILLATOR	1	H4G1805A0003
R1348	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1		X7	VSX0906	CRYSTAL OSCILLATOR	1	H4G2705A0001
R1349	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1		X8,X9	VSX0788	CRYSTAL OSCILLATOR	2	H1C2705B0006
R1350	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1						
R1351	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1				MISCELLANEOUS		
R1352	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1						
R1353	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1		VML2143	CARD PULLER	1		
R1355	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		VML2144	CARD PULLER	1		
R1356	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		VMP6526	SUPPORT ANGLE	2		
R1357,58	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		XNG26EFXS	NUT	4		
R1359	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		XYN26+C12	SCREW	4		
R1360,61	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		VMG1352	BACK CASE	4		
R1362	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		VSC5121	HEAT SINK (B)	1		
R1363	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		VMS6278	P.C.B. POST	4		
R1364-74	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	11		XWG3FX	WASHER	3		
R1378-27	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	50		XNG3C	NUT	4		
R1428	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		XYN3+K5	SCREW	4		
R1431-40	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	10		VEE0N53	L2 CABLE 2	1		
R1441	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		VEP83552A	L2 GATE P.C.BOARD	1		
R1442-51	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	10		VEE0N52	L1 CABLE 1	1		FOR VEP83552A
R1452	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		VMZ3138	INSULATION SHEET	1		
R1453,54	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2		VHN0338	NYLON RIVET	6		
R1456,57	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2						
R1458	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1						
R1459	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1						
R1460	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1						
R1461-65	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5						
R1470-79	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	10		■ E7	VEP86316A	SYSCON SERVO P.C.BOARD	1	(RTL)
R1510	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1						
R1538-41	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	4						
R1542	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C2004-11	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	8	
R1544	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C2012	EEVHB1C470	E.CAPACITOR 16V 47U	1	
R1545	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C2013,14	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
R1546	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C2015,16	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6621	EEVHB1C100	E.CAPACITOR 16V 10U	1		IC2023	TE7751	IC	1	C12BZ0000156
C6623	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1		IC2025	TVHC175FT	IC	1	
C6624	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		IC2027	TVHT541FT	IC	1	
C6625	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1		IC2100	UPC4741G2	IC	1	
C6626	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2101,02	NJM4580ED	IC	2	C0ABBB000123
C6627	EEVHP1E4R7	E.CAPACITOR 25V 4.7U	1		IC2104	UPC4741G2	IC	1	
C6628	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1		IC2105	NJM2901M	IC	1	C0BBCA000008
C6629	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1		IC2106	TVHC14FT	IC	1	
C6630	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1		IC2107	UPC4741G2	IC	1	
C6631	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2108	NJM2901M	IC	1	C0BBCA000008
C6632	EEVHP1E4R7	E.CAPACITOR 25V 4.7U	1		IC2109	TVHC14FT	IC	1	
C6633	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2110	UPC4741G2	IC	1	
C6635	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2111,12	NJM4580ED	IC	2	C0ABBB000123
C6636,37	EEVHB1E330P	E.CAPACITOR 25V 33U	2		IC2113	NJM2901M	IC	1	C0BBCA000008
C6638	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2114	UPC4741G2	IC	1	
C6639,40	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	2		IC2115,16	NJM4580ED	IC	2	C0ABBB000123
C6701-13	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	13		IC2300	MC74HC4052F	IC	1	C0JBAR000051
C6805-18	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	14		IC2301	THC4053FT	IC	1	
C6820-22	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3		IC2302,03	NJM4580ED	IC	2	C0ABBB000123
C6901	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1		IC2304	C0JBAZ000527	IC	1	C0JBAZ000526
C6902,03	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	2		IC2305	NJM4580ED	IC	1	C0ABBB000123
C6904-07	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4		IC2306	AD633JR	IC	1	C0ZBZ0000158
C6908	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1		IC2307	UPC4074G2	IC	1	
C6911-33	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	23		IC2308	THC4053FT	IC	1	
C6934,35	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2		IC2310	MC74HC157AF	IC	1	
C6951-53	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3		IC2311	NJM2903M	IC	1	C0BBBA000019
C6954,55	EEVHB1A330	E.CAPACITOR 10V 33U	2		IC2400,01	UPC4741G2	IC	2	
C6956	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1		IC2402-04	MC74HC4051F	IC	3	C0JBAR000049
C6963-71	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9		IC2405	SMP08FS	IC	1	
C6972	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2406,07	UPC4074G2	IC	2	
C6973-75	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3		IC2408	UPC4741G2	IC	1	
C6976	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1		IC2409	NJM4558M	IC	1	C0ABBB000044
C6977,78	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	2		IC2412	NJM4580ED	IC	1	C0ABBB000123
					IC2413	NJM4558M	IC	1	C0ABBB000044
D2001-07	LN1251CAL	DIODE	7		IC2414	AD7868AR	IC	1	C0FBZG000001
D2100-11	MA147	DIODE	12		IC2415	MC74HC4052F	IC	1	C0JBAR000051
D2300,01	MA8039-L	DIODE	2		IC2417	TVHT244FT	IC	1	
D2302,03	MA8024	DIODE	2		IC2602	TVHT541FT	IC	1	
D2304,05	MA147	DIODE	2		IC2603	SLA912SF2E	IC	1	C1AB00000872
D2306,07	MA8039-L	DIODE	2		IC2604,05	AD7840JN	IC	2	C0FABZ000009
D2308-10	MA3J14300L	DIODE	3		IC2608	UPC4741G2	IC	1	
D2311,12	MA8039-L	DIODE	2		IC2609	THC4053FT	IC	1	
D2400-03	MA8024	DIODE	4		IC2702	LVX3245QSC	IC	1	
D2900-13	MA704A	DIODE	14		IC2703,04	C0JBAZ001544	IC	2	
D6001	MA3J14300L	DIODE	1		IC2705,06	TC7W53F	IC	2	
D6071,72	MA3J14300L	DIODE	2		IC2801	0P177FS	IC	1	
D6301-08	MA3J14300L	DIODE	8		IC2802	AD8842AR	IC	1	
D6401-04	MA3J14300L	DIODE	4		IC2803-05	UPC4741G2	IC	3	
D6501,02	MA3J14300L	DIODE	2		IC2806	NJM4558M	IC	1	C0ABBB000044
D6503	LN1251CAL	DIODE	1		IC2807	TC4W53F	IC	1	C0JBAR000225
D6600-05	MA3J14300L	DIODE	6		IC2851	0P177FS	IC	1	
D6951	MA704A	DIODE	1		IC2852	AD8842AR	IC	1	
					IC2853-55	UPC4741G2	IC	3	
DL2600	VLD0256	DELAY LINE	1		IC2857	TC4W53F	IC	1	C0JBAR000225
FL2900-04	VLFO576	FILTER	5	J0HACH000011	IC2900-05	NJM78L12UA	IC	6	C0CBAK000001
					IC2906-09	NJM79L12UA	IC	4	
IC2001	MC68332CFC16	IC	1	C2GBC0000060	IC2910,11	XC62FP5002P	IC	2	
IC2002	VSI3437H	IC	1		IC2912,13	XC62DN5002P	IC	2	
IC2003	TVHC02FT	IC	1		IC6001	TL7705CPSB	IC	1	C0EBS0000002
IC2004	TVHC74FT	IC	1		IC6002	VSI3441M	IC	1	
IC2005	C0JBAZ000527	IC	1	C0JBAZ000526	IC6004	STK1744-D45I	IC	1	
IC2007	TVHC74FT	IC	1		IC6005	HD64180ZRP10	IC	1	C2GAA0000024
IC2008	TVHC08FT	IC	1		IC6006	TC74HC4040AF	IC	1	C0JBAK000098
IC2009	TC74HC4050AF	IC	1		IC6007,08	T74VHC541F	IC	2	
IC2010	TVHC86FT	IC	1		IC6009	TC74HC4050AF	IC	1	
IC2011,12	Y7C18525SC	IC	2		IC6010	74F32SJ	IC	1	
IC2013	IDT71321L55F	IC	1	C3HBCC000002	IC6011	TVHC00FT	IC	1	
IC2014	TVHC175FT	IC	1		IC6012	TVHC08FT	IC	1	
IC2015	TVHC164FT	IC	1		IC6013-15	TVHC138FT	IC	3	
IC2016	TVHC273FT	IC	1		IC6016	LC35256FM70U	IC	1	
IC2017	TVHC74FT	IC	1		IC6017	S80727ANDQ	IC	1	
IC2018	TVHC08FT	IC	1		IC6072	TVHC14FT	IC	1	
IC2019	SLA909SF1G	IC	1	C1AB00000871	IC6073,74	TVHC74FT	IC	2	
IC2022	TVHC244FT	IC	1		IC6075	TC74HC4050AF	IC	1	
					IC6076	TVHC161FT	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC6077	TE7751	IC	1	C1ZBZ0000156	IC6909	TVHC175FT	IC	1	
IC6078	TVHC08FT	IC	1		IC6951	XC62FP3302P	IC	1	
IC6079,80	TC74HC4050AF	IC	2		IC6952	C1AB00000936	IC	1	
IC6141	TVHC244FT	IC	1		IC6956	TLCX244FT	IC	1	
IC6142	TC74HC4024AF	IC	1	C0JBAK000142	IC6957	DS90LV048A	IC	1	
IC6146	TE7751	IC	1	C1ZBZ0000156	IC6958	TVHT541FT	IC	1	
IC6147-50	TC74HC4094AF	IC	4						
IC6151-54	TVHC165FT	IC	4		ID10	VVSI3549E	SOFTWARE	1	
IC6155,56	TC74HC4050AF	IC	2		ID15	VVSI3460	SOFTWARE	1	
IC6157	TVHC14FT	IC	1						
IC6158	LVX3245QSC	IC	1		IP2701	X9144L7T100	IC	1	
IC6211-13	TVHC138FT	IC	3		IP6145	X9144L7T100	IC	1	
IC6214	TE7751	IC	1	C1ZBZ0000156	IP6356	X9144L7T100	IC	1	
IC6215-18	TC74HC4094AF	IC	4		IP6504	C3FBLD000046	IC	1	
IC6219	TC74HC4050AF	IC	1		IP6505	C2DBLK000001	IC	1	
IC6220-23	TVHC165FT	IC	4						
IC6224	IDT71321L55F	IC	1	C3HBCC000002	IS2002	VJS2336A040	CONNECTOR (FEMALE) 5P	1	K3E040C00029
IC6281	Z84C4310FEC	IC	1	C2ZBZ0000312	IS6002	VJS2336A032	CONNECTOR (FEMALE)	1	K3E032C00033
IC6282	TVHC138FT	IC	1		IS6004	VJS2336A028	CONNECTOR (FEMALE)	1	K3E028C00054
IC6283	THC4053FT	IC	1		IS6005	VJS1830	CONNECTOR (FEMALE)	1	
IC6284	TC74HC4040AF	IC	1	C0JBAK000098					
IC6285	T74VHCU04F	IC	1		L2001,02	VLQ0576	COIL	2	
IC6286,87	T74VHC126F	IC	2		L2701	VLP0192	COIL	1	
IC6288	TC74HC4050AF	IC	1		L6001	VLQ0576	COIL	1	
IC6289	TVHC153FT	IC	1		L6141,42	VLQ0576	COIL	2	
IC6290	MC1488M	IC	1	C1DB00000056	L6301-08	VLQ0576	COIL	8	
IC6291	MC1489AM	IC	1		L6401-04	VLQ0576	COIL	4	
IC6292	SN75C1168NS	IC	1		L6501,02	VLQ0163J470	COIL 47UH	2	
IC6351	UPD71054GB	IC	1		L6951	VLF1151A132	COIL	1	
IC6352	IDT71321L55F	IC	1	C3HBCC000002	L6952	VLP0192	COIL	1	
IC6353-55	LVX3245QSC	IC	3						
IC6357	SN75C1168NS	IC	1		P2001,02	VJP3832	CONNECTOR (MALE)	2	K1KAC8B00005
IC6359	SN75C1168NS	IC	1		P6141	VJP3125B008	CONNECTOR (MALE)	1	
IC6422	IDT71321L55F	IC	1	C3HBCC000002	P6501	VJS3791B020	CONNECTOR (FEMALE)	1	
IC6423-25	LVX3245QSC	IC	3		P6502	K1KA10A00303	CONNECTOR (MALE)	1	
IC6427	SN75C1168NS	IC	1		P6901	VJP1607T	CONNECTOR (MALE)	1	
IC6428	LVX3245QSC	IC	1						
IC6503	TVHC08FT	IC	1		Q2300	2SD601A-R	TRANSISTOR	1	
IC6506	TCVHC74F	IC	1		Q2301,02	2SB709A-R	TRANSISTOR	2	
IC6507,08	C0JABAB000422	IC	2		Q2303	2SD601A-R	TRANSISTOR	1	
IC6601	UPC4741G2	IC	1		Q2304	2SB709A-R	TRANSISTOR	1	
IC6602	NJM4560MD	IC	1	C0ABBB000116	Q2305	2SD601A-R	TRANSISTOR	1	
IC6603	THC4053FT	IC	1		Q6600-03	2SK198-R	TRANSISTOR	4	2SK01980R
IC6604	UPC319G2	IC	1	C0BBBB000009					
IC6606	NJM2068MD	IC	1	C0ABBB000031	QR2001	UN5213	TRANSISTOR-RESISTOR	1	
IC6607,08	THC4053FT	IC	2		QR2100	UN5213	TRANSISTOR-RESISTOR	1	
IC6609,10	NJM2068MD	IC	2	C0ABBB000031	QR2101	UN5113	TRANSISTOR-RESISTOR	1	
IC6701	TLCX245FT	IC	1		QR2102	UN5213	TRANSISTOR-RESISTOR	1	
IC6702	TVHC08FT	IC	1		QR2103	UN5113	TRANSISTOR-RESISTOR	1	
IC6703	TVHC32FT	IC	1		QR2104,05	UN5213	TRANSISTOR-RESISTOR	2	
IC6704,05	TVHC541FT	IC	2		QR2106	UN5113	TRANSISTOR-RESISTOR	1	
IC6706	TLCX245FT	IC	1		QR2107	UN5213	TRANSISTOR-RESISTOR	1	
IC6707,08	TVHC541FT	IC	2		QR2108	UN5113	TRANSISTOR-RESISTOR	1	
IC6709	SN74S1051NS	IC	1		QR2109,10	UN5213	TRANSISTOR-RESISTOR	2	
IC6710,11	TVHC541FT	IC	2		QR2111	UN5113	TRANSISTOR-RESISTOR	1	
IC6712	SN74S1051NS	IC	1		QR2112	UN5213	TRANSISTOR-RESISTOR	1	
IC6713	TVHT541FT	IC	1		QR2113	UN5113	TRANSISTOR-RESISTOR	1	
IC6803	TVHC32FT	IC	1		QR2114	UN5213	TRANSISTOR-RESISTOR	1	
IC6804	TVHC08FT	IC	1		QR2300	UN5213	TRANSISTOR-RESISTOR	1	
IC6805-07	LVX3245QSC	IC	3		QR2301	UN5113	TRANSISTOR-RESISTOR	1	
IC6808	TVHC32FT	IC	1		QR2302	UN5215	TRANSISTOR-RESISTOR	1	
IC6809,10	TLCX244FT	IC	2		QR2303	UN5115	TRANSISTOR-RESISTOR	1	
IC6811,12	SN74S1051NS	IC	2		QR2304	UN5213	TRANSISTOR-RESISTOR	1	
IC6813	TLCX245FT	IC	1		QR6072,73	UN5112	TRANSISTOR-RESISTOR	2	
IC6814	TLCX244FT	IC	1		QR6074	UN5215	TRANSISTOR-RESISTOR	1	
IC6816	TLCX244FT	IC	1		QR6501	UN5213	TRANSISTOR-RESISTOR	1	
IC6817	SN74S1053NS	IC	1		QR6600-03	UN5213	TRANSISTOR-RESISTOR	4	
IC6901	KG2H0650041	IC	1						
IC6902	TVHC74FT	IC	1		R2002-05	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
IC6903	TVHC175FT	IC	1		R2006	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC6904	T74VHCU04F	IC	1		R2007	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
IC6905	KG2H0650041	IC	1		R2009-12	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	4	
IC6906	TVHC175FT	IC	1		R2013	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
IC6907	MAX3223CAP	IC	1	C0ZBZ0000220	R2014	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
IC6908	TVHC74FT	IC	1		R2015-18	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6835-41	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	7		C2004	ECA1AXS680	E.CAPACITOR 10V 68U	1	
R6843	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C2005,06	ECA1HXS010	E.CAPACITOR 50V 1U	2	
R6844	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C2007	ECA1HXLV101	E.CAPACITOR 50V 100U	1	
R6853,54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C2008	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
R6855	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		C2009-11	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	3	
R6856-79	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	24		C2012,13	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R6887	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C2014	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
R6904-06	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3		C2016	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
R6910	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1		C2051-53	ECA1HXS4R7	E.CAPACITOR 50V 4.7U	3	
R6913	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C2054	ECA1AXS680	E.CAPACITOR 10V 68U	1	
R6914	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1		C2055,56	ECA1HXS010	E.CAPACITOR 50V 1U	2	
R6915	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1		C2057	ECA1HXLV101	E.CAPACITOR 50V 100U	1	
R6917	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C2058	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
R6919,20	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		C2059-61	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	3	
R6951,52	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C2062,63	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R6955	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C2064	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
R6957,58	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C2065	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
R6959-67	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	9		C2066	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
R6985,86	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C2101-03	ECA1HXS4R7	E.CAPACITOR 50V 4.7U	3	
R6987	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C2104	ECA1AXS680	E.CAPACITOR 10V 68U	1	
R6988,89	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C2105	ECA1HXS010	E.CAPACITOR 50V 1U	1	
R6991	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C2106	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
R6993	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		C2107	ECA1HXLV101	E.CAPACITOR 50V 100U	1	
R6994-99	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6		C2108	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
R7000,01	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C2109-11	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	3	
					C2112,13	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
SW2001	VSS0184	SWITCH	1		C2114	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
SW6071	VSS0367-08B	SWITCH	1		C2115	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
SW6501	VSS0367-08B	SWITCH	1		C2116	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
					C2151-53	ECA1HXS4R7	E.CAPACITOR 50V 4.7U	3	
TG2001-04	EYF6CU	TEST POINT	4		C2154	ECA1AXS680	E.CAPACITOR 10V 68U	1	
					C2155	ECA1HXS010	E.CAPACITOR 50V 1U	1	
TP2002-07	EYF6CU	TEST POINT	6		C2156	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
TP2011-14	EYF6CU	TEST POINT	4		C2157	ECA1HXLV101	E.CAPACITOR 50V 100U	1	
TP2101-06	EYF6CU	TEST POINT	6		C2158	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
TP2303-06	EYF6CU	TEST POINT	4		C2159-61	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	3	
TP2402	EYF6CU	TEST POINT	1		C2162,63	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
TP2404	EYF6CU	TEST POINT	1		C2164	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
TP2501,02	EYF6CU	TEST POINT	2		C2166	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
TP2601-04	EYF6CU	TEST POINT	4		C2201-05	EEVHP1HR22	E.CAPACITOR 50V 0.22U	5	
TP2803	EYF6CU	TEST POINT	1		C2206-09	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
TP2807	EYF6CU	TEST POINT	1		C2230,31	ECA1HXKN2R2	E.CAPACITOR 50V 2.2U	2	
TP2810,11	EYF6CU	TEST POINT	2		C2232	ECA1HXL470	E.CAPACITOR 50V 47U	1	
TP2813	EYF6CU	TEST POINT	1		C2233,34	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
TP2817	EYF6CU	TEST POINT	1		C2251	ECA1HXKN2R2	E.CAPACITOR 50V 2.2U	1	
TP2820	EYF6CU	TEST POINT	1		C2281	ECA1CX470	E.CAPACITOR 16V 47U	1	
TP6281,82	EYF6CU	TEST POINT	2		C2282,83	ECA1HXLV101	E.CAPACITOR 50V 100U	2	
TP6501-11	EYF6CU	TEST POINT	11		C2284	ECA1HXL470	E.CAPACITOR 50V 47U	1	
TP6600,01	EYF6CU	TEST POINT	2		C2285	ECA1HXLV101	E.CAPACITOR 50V 100U	1	
TP6901-06	EYF6CU	TEST POINT	6		C2286	ECA1CX470	E.CAPACITOR 16V 47U	1	
TP6910,11	EYF6CU	TEST POINT	2		C2290-97	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	8	
TP6951-54	EYF6CU	TEST POINT	4		C2301	ECA1AXS680	E.CAPACITOR 10V 68U	1	
					C2302	ECQB1H104JF	P.CAPACITOR 50V 0.1U	1	
X2001	VSX0519	CRYSTAL OSCILLATOR	1	H0D160500011	C2303-29	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	27	
X6001	VSX0519	CRYSTAL OSCILLATOR	1	H0D160500011	C2401-20	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	20	
X6281	VSX0541	CRYSTAL OSCILLATOR	1	H2A614300003	C2501	ECA1HXL470	E.CAPACITOR 50V 47U	1	
X6501	VSX0641	CRYSTAL OSCILLATOR	1		C2502	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
X6901	VSX1001	CRYSTAL OSCILLATOR	1	H2C143500002	C2503	ECQB1H224JF	P.CAPACITOR 50V 0.22U	1	
X6902	VSX0918	CRYSTAL OSCILLATOR	1	H0J250500005	C2504,05	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
					C2506,07	ECUX1H223KBN	C.CAPACITOR CH 50V 0.22U	2	
		MISCELLANEOUS			C2508-10	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
	VML2143	CARD PULLER	1		D2001	MA151WK	DIODE	1	
	VML2144	CARD PULLER	1		D2002-07	10E1	DIODE	6	
	VMZ3137	INSULATION SHEET	1		D2008-11	MA151K	DIODE	4	
	VHN0338	NYLON RIVET	6		D2012	31DQ06	DIODE	1	BOJAPG000003
					D2013	MA151K	DIODE	1	
					D2051	MA151WK	DIODE	1	
					D2052-57	10E1	DIODE	6	
					D2058-61	MA151K	DIODE	4	
					D2062	31DQ06	DIODE	1	BOJAPG000003
■ E8	VEP82092B	DRIVE P.C.BOARD	1	(RTL)	D2063	MA151K	DIODE	1	
					D2101	MA151WK	DIODE	1	
					D2102-07	10E1	DIODE	6	
C2001-03	ECA1HXS010	E.CAPACITOR 50V 1U	3		D2108-11	MA151K	DIODE	4	

[illegible]

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	XYN3+F12S	SCREW	1		C267	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	XYN3+F14S	SCREW	7		C268,69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
					C270	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
					C271	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
					C272,73	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
					C274	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
					C275	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
■ E9	VEP85198A	EQ P.C.BOARD	1 (RTL)		C276	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
					C279	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
					C280-83	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C1,C2	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C284	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C3	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C286	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4-C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		C287	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C7	EEUFC1A681	E.CAPACITOR 10V 680U	1		C288	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C8	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C289	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C9	EEUFC1A681	E.CAPACITOR 10V 680U	1		C290	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C10-14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	5		C291	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C15	EEUFC1A681	E.CAPACITOR 10V 680U	1		C292	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C16	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C293	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C17	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C294	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C18	EEUFC1A681	E.CAPACITOR 10V 680U	1		C295	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C19	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C296,97	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C20,21	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C298,99	ECST1CC336Z	T.CAPACITOR CH 16V 33U	2	
C22	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C300	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C101	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1		C301	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C102,03	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C302	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	1	
C105	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C303	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C107,08	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C304,05	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C110-13	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4		C306	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C114-21	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	8		C307,08	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C122-37	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	16		C309	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C200,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C310,11	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C202	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C312	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C203	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		C313,14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C204	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C315	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C205	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1		C400,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C206,07	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2		C402	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C208,09	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C403	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C210	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1		C404	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C211	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C405	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C212	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C406,07	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C213,14	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2		C408,09	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C215	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C410	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C216	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1		C411	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C217	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C412	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C218	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C413,14	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2	
C219	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C415	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C220	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C416	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
C222	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C417	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C224	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C418	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C225	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C419	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C226	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C420	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C227	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C422	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C229	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1		C424	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C230	ECUX1H104KBV	C.CAPACITOR CH 50V 0.1U	1		C425	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C233	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		C426	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C234-36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3		C427	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C237	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1		C429	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C238	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1		C430	ECUX1H104KBV	C.CAPACITOR CH 50V 0.1U	1	
C239,40	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C433	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C241	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		C434-36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C243	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C437	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C244	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1		C438	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C245-49	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	5		C439,40	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C250	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		C441	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C251-53	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	3		C443	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C254	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1		C444	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1	
C255,56	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2		C445-49	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	5	
C257	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1		C450	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C259	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		C451-53	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	3	
C260	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		C454	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C262	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1		C455,56	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2	
C263	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		C457	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C264,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2		C459	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C266	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1		C460	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C462	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C463	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C464,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C466	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C467	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C468,69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C470	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C471	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C472,73	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C474	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C475	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C476	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
C479	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
C480-83	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C484	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C486	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C487	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C488	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C489	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C490	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C491	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C492	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C493	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C494	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C495	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C496,97	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C498,99	ECST1CC336Z	T.CAPACITOR CH 16V 33U	2	
C500	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C501	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C502	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	1	
C503	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C504,05	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C506	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C507,08	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C509	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C510,11	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C512	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C513,14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C515	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C600,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C602	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C603	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C604	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C605	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C606,07	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C608,09	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C610	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C611	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C612	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C613,14	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2	
C615	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C616	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
C617	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C618	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C619	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C620	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C622	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C624	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C625	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C626	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C627	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C629	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C630	ECUX1H104KBV	C.CAPACITOR CH 50V 0.1U	1	
C633	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C634-36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C637	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C638	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C639,40	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C641	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C643	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C644	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1	
C645-49	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	5	
C650	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C651-53	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	3	
C654	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C655,56	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	2	
C657	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C659	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C660	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C662	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C663	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C664,65	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C666	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C667	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C668,69	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C670	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C671	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C672,73	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C674	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C675	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C676	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
C679	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
C680-83	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C684	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C686	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C687	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C688	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C689	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C690	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C691	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C692	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C693	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C694	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C695	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C696,97	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C698,99	ECST1CC336Z	T.CAPACITOR CH 16V 33U	2	
C700	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C701	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C702	ECUX1H050CCV	C.CAPACITOR CH 50V 5P	1	
C703	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C704,05	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C706	ECST0JY106Z	T.CAPACITOR CH6.3V 10U	1	
C707,08	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C709	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C710,11	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C712	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C713,14	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C715	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C800,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C802	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C803	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C804	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C805	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C806,07	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C808,09	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C810	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C811	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C812	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C813,14	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2	
C815	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C816	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
C817	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C818	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C819	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
C820	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C822	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C824	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C825	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C826	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C827	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C829	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C830	ECUX1H104KBV	C.CAPACITOR CH 50V 0.1U	1	
C833	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C834-36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C837	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C838	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C839,40	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C841	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C843	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C844	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R288	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R381	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R289	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R382,83	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R290	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R384	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R291	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1		R385	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R292	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R386	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R293	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1		R387	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R294	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R388	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R295	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R389	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R296	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R390	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R297	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R391	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R298	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R392	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R299	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R393	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R300	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R394,95	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R301,02	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		R396	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R303	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R397	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R304	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1		R398	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R306	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1		R399	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R307	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R400	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R308	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R401,02	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R309	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R403	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R310	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R404	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R311,12	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R405	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R313	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1		R406,07	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R314	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		R408	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R315	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R409	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R316	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R410	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R317	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R411	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R318	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1		R412	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R319	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1		R413	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R320,21	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R414	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R322	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1		R415	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R323	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		R416,17	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R324	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R418	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R325	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R419	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R326	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1		R420	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R327	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R421	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R328	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R422,23	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R329	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R424	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R330	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1		R425	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R331,32	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2		R426	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R333	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R427	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R334	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R428	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R335	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R429	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R336	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1		R430	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R337	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1		R431	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R338	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R432	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R339	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1		R433	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R340,41	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R434,35	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R342	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1		R436	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R343,44	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		R437	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R345,46	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2		R438,39	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R347	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R440	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R348	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	1		R441	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R349	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R442,43	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R350,51	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		R444	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R352-55	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4		R445	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R356	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1		R446	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R357	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R447	ERJ3RBD151	M.RESISTOR CH 1/16W 150	1	
R358	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1		R449	ERJ3RED300	M.RESISTOR CH 1/16W 30	1	
R359	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R450	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R360	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R451	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R361	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R453	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R362	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R454	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R363,64	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2		R455	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R365	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1		R456,57	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R366	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R458	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R367	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R459	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R368	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1		R460	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R369	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R461	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R370	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1		R462	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R371	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R463	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R372,73	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		R464,65	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R374	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R466	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R375,76	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2		R467	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R377,78	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2		R468	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4117	NJM78L12UA	IC	1	C0CBAKC00001					
IC4118	NJM79L12UA	IC	1		IP4801	EPC2TC32	IC	1	
IC4119	NJM78L12UA	IC	1	C0CBAKC00001					
IC4120	NJM79L12UA	IC	1		L4001-07	VLQEL06F470K	COIL 47UH	7	G0C470K00005
IC4121	MC74HC4052F	IC	1	C0JBAR000051	L4901	VLF1151A132	COIL	1	
IC4122	NJM4558M-D	IC	1		L4902	VLP0183	COIL	1	J0JCK0000007
IC4123	XC62FP5002P	IC	1						
IC4124	XC62DN5002P	IC	1		P1,P2	VJP3454B096	CONNECTOR (MALE)	2	K1KA96B00021
IC4125	MC74HC4052F	IC	1	C0JBAR000051	P4001	VJP1230T	CONNECTOR (MALE) 3P	1	
IC4201	MC74HC4052F	IC	1	C0JBAR000051	P4002	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197
IC4202	NJM4580ED	IC	1	C0ABBB000123	P4003	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198
IC4203	NJM2043MD	IC	1	C0ABBB000029	P4004	VJP1230T	CONNECTOR (MALE) 3P	1	
IC4204	NJM78L12UA	IC	1	C0CBAKC00001	P4101	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197
IC4205,06	AQV212SX	IC	2		P4801	VJP3125B008	CONNECTOR (MALE)	1	
IC4207	NJM79L12UA	IC	1						
IC4208	XC62FP5002P	IC	1		Q4001	2SD602A-R	TRANSISTOR	1	
IC4209	NJM2100MD	IC	1		Q4002	2SC1847-R	TRANSISTOR	1	
IC4210	AK4503VF	IC	1		Q4003,04	2SB710A	TRANSISTOR	2	
IC4211	NJM4558M-D	IC	1		Q4005	2SD602A-R	TRANSISTOR	1	
IC4301	NJM4558M-D	IC	1		Q4006-09	2SD1994A-R	TRANSISTOR	4	
IC4302	MC74HC4053F	IC	1	C0JBAR000054	Q4010-12	2SD602A-R	TRANSISTOR	3	
IC4303,04	BA301	IC	2		Q4013,14	2SB710A	TRANSISTOR	2	
IC4305-08	LM318PS	IC	4		Q4015,16	2SD602A-R	TRANSISTOR	2	
IC4309	NJM78L12UA	IC	1	C0CBAKC00001	Q4017-23	2SB710A	TRANSISTOR	7	
IC4310	NJM79L12UA	IC	1		Q4024-27	2SD602A-R	TRANSISTOR	4	
IC4401	MB621926	IC	1		Q4028-35	2SD1994A-R	TRANSISTOR	8	
IC4402	MSM514800C7J	IC	1		Q4036-41	2SD1328	TRANSISTOR	6	
IC4403	XC62FP5002P	IC	1		Q4101	2SB710A	TRANSISTOR	1	
IC4404	MC74HC4053F	IC	1	C0JBAR000054	Q4102	2SD602A-R	TRANSISTOR	1	
IC4405,06	NJM2100MD	IC	2		Q4103	2SB710A	TRANSISTOR	1	
IC4407,08	NJM4558M-D	IC	2		Q4104,05	2SD602A-R	TRANSISTOR	2	
IC4409	AK4503VF	IC	1		Q4106	2SB792-R	TRANSISTOR	1	
IC4501-03	NJM4558M-D	IC	3		Q4107,08	2SD1149-R	TRANSISTOR	2	
IC4504-06	NJM2903M	IC	3	C0BBBA000019	Q4109,10	2SD602A-R	TRANSISTOR	2	
IC4507	NJM78L12UA	IC	1	C0CBAKC00001	Q4201	2SD1328	TRANSISTOR	1	
IC4508	NJM79L12UA	IC	1		Q4202	2SD1994A-R	TRANSISTOR	1	
IC4605	XC62FP5002P	IC	1		Q4203	2SB1322A-R	TRANSISTOR	1	
IC4606	AK4393VF	IC	1	C0FBBK000013	Q4204	2SD1994A-R	TRANSISTOR	1	
IC4607	NJM2043MD	IC	1	C0ABBB000029	Q4205	2SB1322A-R	TRANSISTOR	1	
IC4608	NJM4580ED	IC	1	C0ABBB000123	Q4301	2SB710A	TRANSISTOR	1	
IC4609	MC74HC4052F	IC	1	C0JBAR000051	Q4302	2SD602A-R	TRANSISTOR	1	
IC4610	NJM4580ED	IC	1	C0ABBB000123	Q4303,04	2SD1149-R	TRANSISTOR	2	
IC4611	AD7945BR	IC	1		Q4305	2SB792-R	TRANSISTOR	1	
IC4612	NJM4580ED	IC	1	C0ABBB000123	Q4306,07	2SD602A-R	TRANSISTOR	2	
IC4614	M5203FP	IC	1	C0ABBB000166	Q4501-05	2SD602A-R	TRANSISTOR	5	
IC4615	NJM2043MD	IC	1	C0ABBB000029	Q4601,02	2SD1328	TRANSISTOR	2	
IC4616	NJM4580ED	IC	1	C0ABBB000123	Q4701	2SB710A	TRANSISTOR	1	
IC4617	MC74HC4052F	IC	1	C0JBAR000051	Q4703,04	2SB710A	TRANSISTOR	2	
IC4618,19	NJM4580ED	IC	2	C0ABBB000123	Q4705	2SD1994A-R	TRANSISTOR	1	
IC4620	M5203FP	IC	1	C0ABBB000166	Q4706	2SB1322A-R	TRANSISTOR	1	
IC4621	AD7945BR	IC	1		Q4707	2SD1994A-R	TRANSISTOR	1	
IC4701	MC74HC4052F	IC	1	C0JBAR000051	Q4708	2SB1322A-R	TRANSISTOR	1	
IC4702	NJM4580ED	IC	1	C0ABBB000123	Q4709	2SD1994A-R	TRANSISTOR	1	
IC4703	NJM2043MD	IC	1	C0ABBB000029	Q4710	2SB1322A-R	TRANSISTOR	1	
IC4704	NJM78L12UA	IC	1	C0CBAKC00001	Q4711	2SD1994A-R	TRANSISTOR	1	
IC4705,06	AQV212SX	IC	2		Q4712	2SB1322A-R	TRANSISTOR	1	
IC4707	NJM79L12UA	IC	1		Q4713,14	2SD1328	TRANSISTOR	2	
IC4708	MC74HC4052F	IC	1	C0JBAR000051	Q4717,18	2SD1328	TRANSISTOR	2	
IC4709	NJM4580ED	IC	1	C0ABBB000123					
IC4710	NJM2043MD	IC	1	C0ABBB000029	QR4002-04	UN2213	TRANSISTOR-RESISTOR	3	
IC4711	NJM78L12UA	IC	1	C0CBAKC00001	QR4101	UN2113	TRANSISTOR-RESISTOR	1	
IC4712,13	AQV212SX	IC	2		QR4102	UN221F	TRANSISTOR-RESISTOR	1	
IC4714	NJM79L12UA	IC	1		QR4103	UN2213	TRANSISTOR-RESISTOR	1	
IC4715	YWNJM4556AM	IC	1		QR4104	UN2113	TRANSISTOR-RESISTOR	1	
IC4801	EPF10K30A143	IC	1	C3ZBB0000007	QR4105	UN221F	TRANSISTOR-RESISTOR	1	
IC4802	TLCX245FT	IC	1		QR4106-13	UN2213	TRANSISTOR-RESISTOR	8	
IC4803	TVHC244FT	IC	1		QR4201	UN2213	TRANSISTOR-RESISTOR	1	
IC4804	C0EBE0000073	IC	1		QR4202	UN2113	TRANSISTOR-RESISTOR	1	
IC4805	TLCX245FT	IC	1		QR4301-03	UN2213	TRANSISTOR-RESISTOR	3	
IC4806	SN74S1053NS	IC	1		QR4601,02	UN2213	TRANSISTOR-RESISTOR	2	
IC4807	TLCX245FT	IC	1		QR4603,04	UN2113	TRANSISTOR-RESISTOR	2	
IC4808-10	TVHC244FT	IC	3		QR4605-08	UN2213	TRANSISTOR-RESISTOR	4	
IC4811-19	TVHT244FT	IC	9		QR4701,02	UN2213	TRANSISTOR-RESISTOR	2	
					QR4703	UN2113	TRANSISTOR-RESISTOR	1	
ID10	VVVS13461	SOFTWARE	1		QR4704	UN2213	TRANSISTOR-RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TP4601-04	EYF6CU	TEST POINT	4		C4117	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
VR4001,02	VRV0113B104	V.RESISTOR 100K	2		C4118	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
VR4101,02	VRV0113B103	V.RESISTOR 10K	2		C4119	EEVHB1C220	E.CAPACITOR 16V 22U	1	
VR4103	VRV0113B101	V.RESISTOR 100	1		C4120	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
VR4104,05	VRV0113B103	V.RESISTOR 10K	2		C4121	EEVHB1C220	E.CAPACITOR 16V 22U	1	
VR4107	VRV0113B103	V.RESISTOR 10K	1		C4122	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
VR4108	VRV0113B502	V.RESISTOR 5K	1	D3EC45020002	C4124	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	
VR4109	VRV0113B501	V.RESISTOR 500	1		C4145,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
VR4110	VRV0113B202	V.RESISTOR 2K	1		C4147	EEVHB1C470	E.CAPACITOR 16V 47U	1	
VR4111	VRV0113B502	V.RESISTOR 5K	1	D3EC45020002	C4148,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
VR4112	VRV0113B202	V.RESISTOR 2K	1		C4150	EEVHB1C470	E.CAPACITOR 16V 47U	1	
VR4113	VRV0113B103	V.RESISTOR 10K	1		C4171,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
VR4201	VRV0113B501	V.RESISTOR 500	1		C4201,02	ECA1HHG330	E.CAPACITOR 50V 33U	2	
VR4301	VRV0113B103	V.RESISTOR 10K	1		C4203,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
VR4601,02	VRV0113B103	V.RESISTOR 10K	2		C4205	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
VR4701,02	VRV0113B501	V.RESISTOR 500	2		C4206	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
					C4208	EEVHP1C100	E.CAPACITOR 16V 10U	1	
					C4211,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
		MISCELLANEOUS			C4213	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	VML2143	CARD PULLER	1		C4214	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
	VML2144	CARD PULLER	1		C4215	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1	
					C4216	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
					C4217	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
					C4218	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
					C4219	EEVHB1C220	E.CAPACITOR 16V 22U	1	
					C4220	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
■ E11	VEP84352A	A AD/DA P.C.BOARD	1 (RTL)		C4221	EEVHB1C220	E.CAPACITOR 16V 22U	1	
					C4222	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
					C4224	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	
C4001,02	ECA1HHG330	E.CAPACITOR 50V 33U	2		C4226,27	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C4003,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2		C4228,29	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4005	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C4230	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C4006	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C4231	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4008	EEVHP1C100	E.CAPACITOR 16V 10U	1		C4232,33	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4011,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C4234	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4013	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C4235	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C4014	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1		C4236,37	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4015	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1		C4238	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4016	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1		C4245,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4017	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C4247	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4018	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4248,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4019	EEVHB1C220	E.CAPACITOR 16V 22U	1		C4250	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4020	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1		C4271,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4021	EEVHB1C220	E.CAPACITOR 16V 22U	1		C4301,02	ECA1HHG330	E.CAPACITOR 50V 33U	2	
C4022	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1		C4303,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C4024	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1		C4305	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C4026,27	EEVHB1C100	E.CAPACITOR 16V 10U	2		C4306	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4028,29	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4308	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C4030	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1		C4311,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4031	EEVHB1C100	E.CAPACITOR 16V 10U	1		C4313	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4032,33	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4314	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C4034	EEVHB1C100	E.CAPACITOR 16V 10U	1		C4315	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1	
C4035	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U	1		C4316	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C4036,37	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4317	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4038	EEVHB0J101	E.CAPACITOR 6.3V 100U	1		C4318	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4039,40	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4319	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4041	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4320	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4042,43	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4321	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4044	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4322	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4045,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4324	ECUM1H222JN	C.CAPACITOR CH 50V 2200P	1	
C4047	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4345,46	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4048,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4347	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4050	EEVHB1C470	E.CAPACITOR 16V 47U	1		C4348,49	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4071,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C4350	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4101,02	ECA1HHG330	E.CAPACITOR 50V 33U	2		C4371,72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4103,04	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2		C4401	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4105	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C4402	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4106	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C4403	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4108	EEVHP1C100	E.CAPACITOR 16V 10U	1		C4405,06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4111,12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C4407	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4113	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C4408,09	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4114	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1		C4410	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4115	ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1		C4411	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4116	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1		C4412-14	EEVHB1C100	E.CAPACITOR 16V 10U	3	
					C4415,16	EEVHB0J101	E.CAPACITOR 6.3V 100U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4417,18	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C4419,20	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	2	
C4421,22	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C4424	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4425	ECHU1C473JB	P.CAPACITOR 16V 0.047U	1	
C4426	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C4427-29	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C4430	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C4431	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4432	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4433-36	EEVHB1C100	E.CAPACITOR 16V 10U	4	
C4437,38	ECA1CHG471	C.CAPACITOR 16V 470U	2	
C4439,40	EEVHB1C220	E.CAPACITOR 16V 22U	2	
C4441,42	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4445,46	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4449,50	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4453,54	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4455,56	EEVHB1C470	E.CAPACITOR 16V 47U	2	
C4461,62	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C4476	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4515,16	EEVHB0J101	E.CAPACITOR 6.3V 100U	2	
C4517,18	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C4519,20	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	2	
C4521,22	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C4524	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4525	ECHU1C473JB	P.CAPACITOR 16V 0.047U	1	
C4526	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C4527-29	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C4530	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C4531	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4532	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4533-36	EEVHB1C100	E.CAPACITOR 16V 10U	4	
C4537,38	ECA1CHG471	C.CAPACITOR 16V 470U	2	
C4539,40	EEVHB1C220	E.CAPACITOR 16V 22U	2	
C4541,42	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4545,46	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4561,62	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C4576	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4601	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C4602	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4603	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C4605,06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4607	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C4608,09	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4610	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C4611	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4612-14	EEVHB1C100	E.CAPACITOR 16V 10U	3	
C4615,16	EEVHB0J101	E.CAPACITOR 6.3V 100U	2	
C4617,18	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C4619,20	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	2	
C4621,22	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C4624	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4625	ECHU1C473JB	P.CAPACITOR 16V 0.047U	1	
C4626	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C4627-29	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C4630	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C4631	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4632	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4633-36	EEVHB1C100	E.CAPACITOR 16V 10U	4	
C4637,38	ECA1CHG471	C.CAPACITOR 16V 470U	2	
C4639,40	EEVHB1C220	E.CAPACITOR 16V 22U	2	
C4641,42	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4645,46	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4661,62	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C4676	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C4715,16	EEVHB0J101	E.CAPACITOR 6.3V 100U	2	
C4717,18	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C4719,20	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	2	
C4721,22	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C4724	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C4725	ECHU1C473JB	P.CAPACITOR 16V 0.047U	1	
C4726	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C4727-29	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C4730	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C4731	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
				</

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4209	NJM2043MD	IC	1	C0ABBB000029	L4001	VLQ0576	COIL	1	
IC4210	AK5393VS	IC	1	C0FBAK000001	L4201	VLQ0576	COIL	1	
IC4211	XC62FP5002P	IC	1		L4901	VLF1151A132	COIL	1	
IC4214	NJM78L12UA	IC	1	C0CBAKC00001	L4902	VLP0183	COIL	1	J0JKC0000007
IC4215	NJM79L12UA	IC	1						
IC4301	NJM2043MD	IC	1	C0ABBB000029	P4001,02	VJP3454B096	CONNECTOR (MALE)	2	K1KA96B00021
IC4302	MC74HC4052F	IC	1	C0JBAR000051	P4801	VJP3125B008	CONNECTOR (MALE)	1	
IC4303	NJM4580ED	IC	1	C0ABBB000123					
IC4304	AD7945BR	IC	1		Q4401	2SD1328	TRANSISTOR	1	
IC4305	NJM4580ED	IC	1	C0ABBB000123	Q4402	2SD1994A-R	TRANSISTOR	1	
IC4306	MC74HC4052F	IC	1	C0JBAR000051	Q4403	2SB1322A-R	TRANSISTOR	1	
IC4307,08	NJM4580ED	IC	2	C0ABBB000123	Q4404	2SD1994A-R	TRANSISTOR	1	
IC4309	NJM2043MD	IC	1	C0ABBB000029	Q4405	2SB1322A-R	TRANSISTOR	1	
IC4314	NJM78L12UA	IC	1	C0CBAKC00001	Q4408	2SD1328	TRANSISTOR	1	
IC4315	NJM79L12UA	IC	1		Q4501	2SD1328	TRANSISTOR	1	
IC4401	XC62FP5002P	IC	1		Q4502	2SD1994A-R	TRANSISTOR	1	
IC4403	AK4393VF	IC	1	C0FBBK000013	Q4503	2SB1322A-R	TRANSISTOR	1	
IC4404	NJM2043MD	IC	1	C0ABBB000029	Q4504	2SD1994A-R	TRANSISTOR	1	
IC4405	NJM4580ED	IC	1	C0ABBB000123	Q4505	2SB1322A-R	TRANSISTOR	1	
IC4406	MC74HC4052F	IC	1	C0JBAR000051	Q4508	2SD1328	TRANSISTOR	1	
IC4407	NJM4580ED	IC	1	C0ABBB000123	Q4601	2SD1328	TRANSISTOR	1	
IC4408	MC74HC4052F	IC	1	C0JBAR000051	Q4602	2SD1994A-R	TRANSISTOR	1	
IC4409	NJM4580ED	IC	1	C0ABBB000123	Q4603	2SB1322A-R	TRANSISTOR	1	
IC4410	NJM2043MD	IC	1	C0ABBB000029	Q4604	2SD1994A-R	TRANSISTOR	1	
IC4411,12	AQV212SX	IC	2		Q4605	2SB1322A-R	TRANSISTOR	1	
IC4413	NJM78L12UA	IC	1	C0CBAKC00001	Q4608	2SD1328	TRANSISTOR	1	
IC4414	NJM79L12UA	IC	1		Q4701	2SD1328	TRANSISTOR	1	
IC4415	XC62FP5002P	IC	1		Q4702	2SD1994A-R	TRANSISTOR	1	
IC4416	XC62DN5002P	IC	1		Q4703	2SB1322A-R	TRANSISTOR	1	
IC4504	NJM2043MD	IC	1	C0ABBB000029	Q4704	2SD1994A-R	TRANSISTOR	1	
IC4505	NJM4580ED	IC	1	C0ABBB000123	Q4705	2SB1322A-R	TRANSISTOR	1	
IC4506	MC74HC4052F	IC	1	C0JBAR000051	Q4708	2SD1328	TRANSISTOR	1	
IC4507	NJM4580ED	IC	1	C0ABBB000123	Q4801,02	2SB710A	TRANSISTOR	2	
IC4508	MC74HC4052F	IC	1	C0JBAR000051					
IC4509	NJM4580ED	IC	1	C0ABBB000123	QR4003	UN2113	TRANSISTOR-RESISTOR	1	
IC4510	NJM2043MD	IC	1	C0ABBB000029	QR4004	UN221F	TRANSISTOR-RESISTOR	1	
IC4511,12	AQV212SX	IC	2		QR4005	UN2113	TRANSISTOR-RESISTOR	1	
IC4513	NJM78L12UA	IC	1	C0CBAKC00001	QR4006	UN221F	TRANSISTOR-RESISTOR	1	
IC4514	NJM79L12UA	IC	1		QR4103	UN2113	TRANSISTOR-RESISTOR	1	
IC4601	XC62FP5002P	IC	1		QR4104	UN221F	TRANSISTOR-RESISTOR	1	
IC4603	AK4393VF	IC	1	C0FBBK000013	QR4105	UN2113	TRANSISTOR-RESISTOR	1	
IC4604	NJM2043MD	IC	1	C0ABBB000029	QR4106	UN221F	TRANSISTOR-RESISTOR	1	
IC4605	NJM4580ED	IC	1	C0ABBB000123	QR4203	UN2113	TRANSISTOR-RESISTOR	1	
IC4606	MC74HC4052F	IC	1	C0JBAR000051	QR4204	UN221F	TRANSISTOR-RESISTOR	1	
IC4607	NJM4580ED	IC	1	C0ABBB000123	QR4205	UN2113	TRANSISTOR-RESISTOR	1	
IC4608	MC74HC4052F	IC	1	C0JBAR000051	QR4206	UN221F	TRANSISTOR-RESISTOR	1	
IC4609	NJM4580ED	IC	1	C0ABBB000123	QR4303	UN2113	TRANSISTOR-RESISTOR	1	
IC4610	NJM2043MD	IC	1	C0ABBB000029	QR4304	UN221F	TRANSISTOR-RESISTOR	1	
IC4611,12	AQV212SX	IC	2		QR4305	UN2113	TRANSISTOR-RESISTOR	1	
IC4613	NJM78L12UA	IC	1	C0CBAKC00001	QR4306	UN221F	TRANSISTOR-RESISTOR	1	
IC4614	NJM79L12UA	IC	1		QR4401	UN2213	TRANSISTOR-RESISTOR	1	
IC4704	NJM2043MD	IC	1	C0ABBB000029	QR4402	UN2113	TRANSISTOR-RESISTOR	1	
IC4705	NJM4580ED	IC	1	C0ABBB000123	QR4403	UN2213	TRANSISTOR-RESISTOR	1	
IC4706	MC74HC4052F	IC	1	C0JBAR000051	QR4404	UN2113	TRANSISTOR-RESISTOR	1	
IC4707	NJM4580ED	IC	1	C0ABBB000123	QR4501	UN2213	TRANSISTOR-RESISTOR	1	
IC4708	MC74HC4052F	IC	1	C0JBAR000051	QR4502	UN2113	TRANSISTOR-RESISTOR	1	
IC4709	NJM4580ED	IC	1	C0ABBB000123	QR4503	UN2213	TRANSISTOR-RESISTOR	1	
IC4710	NJM2043MD	IC	1	C0ABBB000029	QR4504	UN2113	TRANSISTOR-RESISTOR	1	
IC4711,12	AQV212SX	IC	2		QR4601	UN2213	TRANSISTOR-RESISTOR	1	
IC4713	NJM78L12UA	IC	1	C0CBAKC00001	QR4602	UN2113	TRANSISTOR-RESISTOR	1	
IC4714	NJM79L12UA	IC	1		QR4603	UN2213	TRANSISTOR-RESISTOR	1	
IC4801	EPF10K30A143	IC	1	C3ZBB0000007	QR4604	UN2113	TRANSISTOR-RESISTOR	1	
IC4802	SN74S1053NS	IC	1		QR4701	UN2213	TRANSISTOR-RESISTOR	1	
IC4803	TLCX245FT	IC	1		QR4702	UN2113	TRANSISTOR-RESISTOR	1	
IC4804	TVHC244FT	IC	1		QR4703	UN2213	TRANSISTOR-RESISTOR	1	
IC4805,06	TLCX245FT	IC	2		QR4704	UN2113	TRANSISTOR-RESISTOR	1	
IC4807	TVHT244FT	IC	1		QR4801,02	UN2213	TRANSISTOR-RESISTOR	2	
IC4808-10	TVHC244FT	IC	3						
IC4811-16	TVHT244FT	IC	6		R4001	ERJ12YJ621	M.RESISTOR CH 1/2W 620	1	
IC4817	C0EBE0000073	IC	1		R4002	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1	
					R4003,04	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	2	
ID10	VVVS13462	SOFTWARE	1		R4005,06	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	2	
					R4007	ERJ6RBD202	M.RESISTOR CH 1/10W 2K	1	
IP4801	EPC2TC32	IC	1		R4008	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1	
					R4009	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC49	TLCX244FT	IC	1		Q1001	2SB709A-R	TRANSISTOR	1	
IC50-52	TLCX245FT	IC	3		Q1002,03	TM3111	TRANSISTOR	2	B1DFED000008
IC53	EPF10K30E203	IC	1		Q1004	2SB1202-S	TRANSISTOR	1	
IC54	TLCX245FT	IC	1						
IC55	TLCX125FT	IC	1		QR1-R4	UN5214	TRANSISTOR-RESISTOR	4	
IC56	EPC2TC32	IC	1						
IC57	C0EBE0000073	IC	1		R1	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC58	UPD65943G028	IC	1		R6	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC60	TLCX245FT	IC	1		R7-15	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	9	
IC61-63	TLCX574FT	IC	3		R20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC64,65	TLCX245FT	IC	2		R33	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
IC66	TVHC244FT	IC	1		R34	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC67,68	GS9023-CFY	IC	2		R35-39	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	5	
IC69-75	TLCX574FT	IC	7		R42-44	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
IC76,77	TLCX245FT	IC	2		R46	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
IC78,79	TLCX574FT	IC	2		R48	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
IC80-82	M66282F	IC	3		R49,50	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2	
IC83	TLCX245FT	IC	1		R51	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC84	MB90098A-107	IC	1		R52	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
IC85	DS92LV1212TM	IC	1		R53,54	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
IC86	C1ZBZ0001645	IC	1		R57	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC87-90	M66282F	IC	4		R59,60	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
IC91,92	GS9032-CVM	IC	2		R61	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
IC93	GS9021-CFU	IC	1	C1AB00000959	R65	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC94	GS9032-CVM	IC	1		R67	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC95,96	ADV7171KS	IC	2	C0ZBZ0000175	R68	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC97	NE521D	IC	1	C0BBBB000013	R69	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC98	AD8184AR	IC	1		R70	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC99	AD8056AR	IC	1	C0ABBB000156	R71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC100	VLF1482	FILTER	1	J0E7004A0006	R72	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC101	ADV7171KS	IC	1	C0ZBZ0000175	R73-75	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
IC102	AD8184AR	IC	1		R76	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC104	AD8056AR	IC	1	C0ABBB000156	R77-81	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
IC105	VLF1482	FILTER	1	J0E7004A0006	R84	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
IC1001	LT1170CQ	IC	1		R86	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC1002	SB3032P	IC	1	C0DBEZ000004	R87	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
IC1003	LT1086CM33	IC	1		R88	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC1004	LT1529CQ	IC	1		R90-92	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
IC1005	LT1573CS8	IC	1		R94-96	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
IC1006	LT1175CS8	IC	1		R97	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R98	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
ID10	VVVS13595B	SOFTWARE	1		R99	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
ID20	VVVS13596E	SOFTWARE	1		R100,01	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
					R102-21	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	20	
J1-J3	VJP4131	CONNECTOR (MALE)	3	K1QZB1AD0003	R122	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R123	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L4-L7	VLQ0319K100	COIL 10UH	4	G1C100K00023	R124-35	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	12	
L17-21	VLQ0319K100	COIL 10UH	5	G1C100K00023	R136	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L22,23	VLQ0426J010	COIL 1UH	2		R137	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L24	VLQ0319K100	COIL 10UH	1	G1C100K00023	R138	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L25	VLQ0426J010	COIL 1UH	1		R139	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L26-28	VLQ0319K100	COIL 10UH	3	G1C100K00023	R140	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L29	VLQ0163J2R7	COIL 2.7UH	1	G1C2R7J00002	R141	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L30-32	VLQ0319K100	COIL 10UH	3	G1C100K00023	R142	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L35-37	VLQ0319K100	COIL 10UH	3	G1C100K00023	R143	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L38	VLQ0163J2R7	COIL 2.7UH	1	G1C2R7J00002	R144	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L1001	VLQ0655M3R3	COIL 3.3U	1		R145	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L1002	VLQ0784470	COIL	1		R146	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L1003	VLQ0655M3R3	COIL 3.3U	1		R147	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L1004	VLQ0651M220	COIL 22UH	1		R148-76	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	29	
L1005	VLQ0441K100	COIL 10UH	1	G1C100K00017	R177,78	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
L1006	VLQ0441K2R2	COIL 2.2UH	1		R179	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
L1007	VLP0192	COIL	1		R180-94	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	15	
L1008-12	VLF1151A132	COIL	5		R195	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R196	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
P1,P2	VJP3454B096	CONNECTOR (MALE)	2	K1KA96B00021	R197	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
P3,P4	VJP3125B008	CONNECTOR (MALE)	2		R198-17	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	20	
P5-P7	VJP4064K100C	CONNECTOR (MALE)	3	K1KAA0A00020	R218,19	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
					R220	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
Q5	2SB709	TRANSISTOR	1		R221-34	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	14	
Q6	XN4501	TRANSISTOR-RESISTOR	1		R235	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
Q7	2SB709	TRANSISTOR	1		R237,38	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
Q8	XN4501	TRANSISTOR-RESISTOR	1		R239,40	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
Q9	2SB709	TRANSISTOR	1		R243,44	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
Q10	XN4501	TRANSISTOR-RESISTOR	1		R247,48	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R823	ERJ3RBD271	M.RESISTOR CH 1/16W 270	1		C19,20	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R824	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		C21	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
R825	ERJ3RBD471	M.RESISTOR CH 1/16W 470	1		C22	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R828	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		C23	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
R831	ERJ3RED470	M.RESISTOR CH 1/16W 47	1		C24	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R832,33	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C25	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
R850	ERDS2TJ103	C.RESISTOR 1/4W 10K	1		C26	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R1001	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		C27	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
R1002	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1		C28,29	ECST0JC686	T.CAPACITOR CH6.3V 68U	2	
R1003,04	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		C30	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
R10017	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C31	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
R10018	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		C32	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R10020	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1		C80-84	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	5	
R10021	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1		C85	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
R10022	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C86-88	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
R10023	ERJ6GEYJ3R3	M.RESISTOR CH 1/10W 3.3	1		C101-03	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
R10024	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C104	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
R10025	VRE0202H47M	M.RESISTOR	1		C105	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
R10026,27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C106,07	ECUM1H103KBN	C.CAPACITOR CH6.3V 0.01U	2	
R10028	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1		C108	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
R10029	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1		C109-13	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
R10030	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		C114	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
R10031	ERJ8GEYJ221	M.RESISTOR CH 1/8W 220	1		C115,16	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R10032	ERJ14YJ470	M.RESISTOR CH 1/4W 47	1						
R10033	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1		D80	MA142K	DIODE	1	
TG4-G9	EYF6CU	TEST POINT	6		IC1	C9ZB00000361	IC	1	
TG1003	EYF6CU	TEST POINT	1		IC2	LVTH244APW	IC	1	C0JBBZ000174
					IC3	FMM4039XC	IC	1	
TH1001	VRT0152090	THERMISTOR	1	D4ZZ00000011	IC10	NJM062V	IC	1	
					IC13	MC10EL16D	IC	1	C0JBZZ000015
TP12,13	EYF6CU	TEST POINT	2		IC14	UPC2726T	IC	1	
TP34	EYF6CU	TEST POINT	1						
TP38	EYF6CU	TEST POINT	1		J1-J5	VJP4131	CONNECTOR (MALE)	5	K1QZB1AD0003
TP41,42	EYF6CU	TEST POINT	2		J6	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
TP74-76	EYF6CU	TEST POINT	3						
TP1001,02	EYF6CU	TEST POINT	2		L1	VLF1151A132	COIL	1	
TP1004	EYF6CU	TEST POINT	1		L2,L3	VLP0183	COIL	2	J0JKC0000007
					L4	VLQ0441K4R7	COIL 4.7UH	1	
VR1	VRV0161B502	V.RESISTOR 5K	1		L10	VLQ07823N3	COIL	1	G1C3N3ZA0001
VR2	VRV0113B201	V.RESISTOR 200	1		L101-04	VLQ07821N8	COIL	4	G1C1N8ZA0001
VR3	VRV0113B101	V.RESISTOR 100	1						
VR4,R5	VRV0113B102	V.RESISTOR 1K	2	D3EC41020001	Q1,Q2	2SC5185	TRANSISTOR	2	
VR6	VRV0113B202	V.RESISTOR 2K	1		Q3-Q5	2SC5012	TRANSISTOR	3	
VR7	VRV0113B102	V.RESISTOR 1K	1	D3EC41020001	Q6,Q7	2SC5185	TRANSISTOR	2	
VR8	VRV0113B101	V.RESISTOR 100	1						
VR9,10	VRV0113B102	V.RESISTOR 1K	2	D3EC41020001	R1-45	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	45	
VR11	VRV0113B202	V.RESISTOR 2K	1		R46-50	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
VR12	VRV0113B102	V.RESISTOR 1K	1	D3EC41020001	R51-57	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	7	
					R58	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
		MISCELLANEOUS			R60	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
					R61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
VML2143	CARD PULLER		1		R63-65	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
VML2144	CARD PULLER		1		R66,67	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
VMS4950	P.C.B. POST		8		R68	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
VEE0N55	S4 CABLE 2		2		R70	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
XYN26+K5	SCREW		12		R71	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
VEE0N54	S4 CABLE 1		1		R80	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
					R81	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
					R82,83	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
					R84	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
					R85,86	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
					R87	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
■ E13	VEP83460B	HD SDI TX P.C.BOARD	1	(RTL)	R88	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
					R89	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
					R91	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
C1	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R101,02	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
C2	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R103,04	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
C3	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R105,06	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
C4	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R107	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
C5	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R108	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R109	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
C7	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R110	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
C8-16	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	9		R111	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
C17,18	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2		R112,13	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1	DE5SC4M-4061	DIODE	1		IC129	TC7SH32FU	IC	1	
D2	MA142K	DIODE	1		IC130,31	D4564163A10B	IC	2	
D3	SFPB-54	DIODE	1	B0JCMC000002	IC132,33	IDT71V124SAP	IC	2	
D9,10	MA142K	DIODE	2		IC134-37	TLCX245FT	IC	4	
D21	MA3J14300L	DIODE	1		IC138-40	IDTLVC574APG	IC	3	
IC1	LT1170CQ	IC	1		IC141	TC7S04FU	IC	1	
IC2	DS90LV048A	IC	1		IC142	MC68HC16Z1PV	IC	1	
IC3	SB3032P	IC	1	C0DBEZH00004	IC143	IDTLVC16245F	IC	1	
IC4	TLCX245FT	IC	1		IC144	TLCX245FT	IC	1	
IC6	TVHC244FT	IC	1		IC145	IDT71V321L5F	IC	1	C3HBCC000023
IC7	TLCX245FT	IC	1		IC147	VSI3594	IC	1	
IC8	DS90LV048A	IC	1		IC148,49	TVHT245F	IC	2	
IC9	LT1086CM33	IC	1		IC150,51	TVHT541FT	IC	2	
IC10	LT1529CQ	IC	1		IC152	IDTLVC574APG	IC	1	
IC11	LT1175CS8	IC	1		IC153	TLCX245FT	IC	1	
IC12	SN74S1053NS	IC	1		IC154	TVHT08FT	IC	1	
IC13	TLCX245FT	IC	1		IC155	XC62FP5002P	IC	1	
IC14	SN74S1051NS	IC	1		IC156	TC7SH08FU	IC	1	
IC15-17	TLCX245FT	IC	3		IC157	TC7W125FU	IC	1	
IC18	X9144L7T144	IC	1		IC158	TC7SH08FU	IC	1	
IC19	TLCX245FT	IC	1		IC159	XC62FP3302P	IC	1	
IC20	IDTLVC574APG	IC	1		IC161	NJM082BM	IC	1	C0ABEB000017
IC22	TLCX245FT	IC	1		IC164	TC7SH04FU	IC	1	
IC23	IDTLVC574APG	IC	1		IC167	IDT388915T0P	IC	1	
IC24	TLCX245FT	IC	1		IC168	C0JBZ001544	IC	1	
IC25	IDTLVC574APG	IC	1		IC169	TC7W53F	IC	1	
IC26	TLCX245FT	IC	1		IC170	TLCX04F	IC	1	
IC27-29	IDTLVC574APG	IC	3		IC171-73	TLCX125FT	IC	3	
IC30	DS92LV1021TM	IC	1		IC174	DS90LV047A	IC	1	
IC31	DS90CR217MTD	IC	1		IC175-77	TLCX245FT	IC	3	
IC32	DS90LV047A	IC	1		IC178	TLCX240FT	IC	1	
IC40-42	TLCX245FT	IC	3		IC179	TLCX245FT	IC	1	
IC43,44	IDTLVC574APG	IC	2		IC181-83	TLCX245FT	IC	3	
IC50	LT1529CQ	IC	1		ID10	VVVS13597A	SOFTWARE	1	
IC51	GS9025-CQM	IC	1	C1AB00000363	ID20	VVVS13598C	SOFTWARE	1	
IC52	TVHC245FT	IC	1		IS147	VJS2336A040	CONNECTOR (FEMALE) 5P	1	K3E040C00029
IC53	GS9020-CFV	IC	1	C1AB00000364	J2,J3	VJP4131	CONNECTOR (MALE)	2	K1QZB1AD0003
IC54	GS9028-CKA	IC	1	C1AB00000365	L1	VLQ0655M3R3	COIL 3.3U	1	
IC60	TLCX74FT	IC	1		L2	VLQ0784470	COIL	1	
IC61	IDTLVC574APG	IC	1		L3	VLQ0655M3R3	COIL 3.3U	1	
IC62	C0JBAA000099	IC	1		L4	VLQ0651M220	COIL 22UH	1	
IC63	IDTLVC574APG	IC	1		L5	VLQ0319K100	COIL 10UH	1	G1C100K00023
IC64	CG31633-2131	IC	1	C1ZBZ0001534	L6	VLQ0441K100	COIL 10UH	1	G1C100K00017
IC65	TC7S04FU	IC	1		L7	VLQ0441K2R2	COIL 2.2UH	1	
IC72,73	IDT70V25L25F	IC	2		L8	VLF1151A132	COIL	1	
IC74	TLCX245FT	IC	1		L9	VLP0183	COIL	1	J0JJC0000007
IC75	X9288L7T144	IC	1		L10-12	VLF1151A132	COIL	3	
IC76	LT1573CS8	IC	1		L13	VLQ0319K100	COIL 10UH	1	G1C100K00023
IC77	C1ZBZ0001644	IC	1		L15-17	VLQ0319K100	COIL 10UH	3	G1C100K00023
IC78-80	TLCX245FT	IC	3		L23	VLQ0426J015	COIL 15UH	1	
IC81,82	TLCX125FT	IC	2		L24-28	VLQ0319K100	COIL 10UH	5	G1C100K00023
IC83	EPC2TC32	IC	1		L29,30	VLQ0426J010	COIL 1UH	2	
IC84	C0EBE0000073	IC	1		L39	VLP0192	COIL	1	
IC85-87	TLCX245FT	IC	3		L40	VLP0183	COIL	1	J0JJC0000007
IC88	TC7S04FU	IC	1		L45,46	VLP0183	COIL	2	J0JJC0000007
IC89-94	IDTLVC574APG	IC	6		L47	VLQ0163J470	COIL 47UH	1	
IC95	XC62FP3302P	IC	1		L51	VLP0192	COIL	1	
IC96	TC7W53F	IC	1		P1,P2	VJP3454B096	CONNECTOR (MALE)	2	K1KA96B00021
IC97	C0JBZ001544	IC	1		P3	VJP3125B008	CONNECTOR (MALE)	1	
IC98	TC7SH08FU	IC	1		P4	VJP4064K100B	CONNECTOR (MALE)	1	
IC109	X9288L7T144	IC	1		P5	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
IC110	UPD83012G002	IC	1		P6	VJP3125B008	CONNECTOR (MALE)	1	
IC111	TC7SH32FU	IC	1		P7	VJP4064K100B	CONNECTOR (MALE)	1	
IC112,13	D4564163A10B	IC	2		Q1	2SB709A-R	TRANSISTOR	1	
IC114,15	IDT71V124SAP	IC	2		Q2,Q3	TM3111	TRANSISTOR	2	B1DFED000008
IC116	UPD83012G002	IC	1		Q4	2SB1202-S	TRANSISTOR	1	
IC117	TC7SH32FU	IC	1		R1	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
IC118,19	D4564163A10B	IC	2		R2	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
IC120,21	IDT71V124SAP	IC	2						
IC122	UPD83012G002	IC	1						
IC123	TC7SH32FU	IC	1						
IC124,25	D4564163A10B	IC	2						
IC126,27	IDT71V124SAP	IC	2						
IC128	UPD83012G002	IC	1						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C55,56	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		L9	VLQ07823N3	COIL	1	G1C3N3ZA0001
C57	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1		L10,11	VLP0173	COIL	2	J0JGC0000015
C58-61	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4		L201	VLP0183	COIL	1	J0JKC0000007
C62,63	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2		L202	VLQ0441K4R7	COIL 4.7UH	1	
C64	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		L203	VLP0183	COIL	1	J0JKC0000007
C65	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1		L204,05	VLQ0441K4R7	COIL 4.7UH	2	
C66	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1						
C67	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		Q1-Q3	2SC5185	TRANSISTOR	3	
C68-70	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		Q4	2SB1218A-R	TRANSISTOR	1	
C71	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1		Q5	2SC5013	TRANSISTOR	1	
C72	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		Q6-Q9	2SD1819A-R	TRANSISTOR	4	
C73	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1		Q10,11	XP4601	TRANSISTOR-RESISTOR	2	
C74	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		Q12,13	2SC5185	TRANSISTOR	2	
C75	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		Q14,15	2SC3583	TRANSISTOR	2	
C76	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1						
C77	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R1,R2	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	2	
C78	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R3	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
C79	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1		R4,R5	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
C80	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R6	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
C81	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R7	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
C82	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1		R8	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
C83	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R9	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
C84	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R10	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C85	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1		R11	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
C86	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R12	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
C87	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R13	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
C88	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1		R14	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
C89	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R15,16	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2	
C90-92	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		R17,18	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
C93	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1		R19	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C94	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R20	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
C95	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		R21	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
C96	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R22	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
C97	ECST1CY475Z	T.CAPACITOR CH 16V 4.7U	1		R23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
C98	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R24	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
C99	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1		R25	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
C100	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1		R26	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
C101,02	ECST1CC336Z	T.CAPACITOR CH 16V 33U	2		R27	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
C201-06	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6		R28,29	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
C207	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R30	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
C208	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R31	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C209	ECST0JC686	T.CAPACITOR CH6.3V 68U	1		R32	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
C210	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R33	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
C211	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R36	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
C212	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R37	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
C213	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R38	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
C214	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		R39	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
C215	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1		R40	ERJ3GEYJ106	M.RESISTOR CH 1/16W 10M	1	
C216-18	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		R41,42	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	2	
					R43	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
D1	MA716	DIODE	1		R44,45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
D3	HSMS-2823	DIODE	1		R46,47	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
D4	HSMS-2824	DIODE	1		R49	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
D5	MA3J14300L	DIODE	1		R52,53	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
D6	MA142WK	DIODE	1		R54	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
D7	MA142K	DIODE	1		R55	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
					R56	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
IC1,C2	IVA-14208	IC	2	C0AAAA000033	R57	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
IC3	MC10EL16D	IC	1	C0JBZZ000015	R58	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
IC4	UPC2746T	IC	1		R59	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC5	NJM062V	IC	1		R60	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
IC6	AD8005ART	IC	1		R61	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
IC7,C8	UPC2726T	IC	2		R62	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
IC9	C1AB00001315	IC	1		R63	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
IC10	C9ZB00000361	IC	1		R65	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
IC11	LVTH244APW	IC	1	C0JBBZ000174	R66	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
					R67	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
J1-J3	VJP4131	CONNECTOR (MALE)	3	K1QZB1AD0003	R68	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
J4	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055	R69	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
					R71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L1-L3	VLQ078210N	COIL	3	G1C10NGA0001	R72	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
L4	VLQ07828N2	COIL	1	G1C8N2ZA0001	R73	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
L5	VLQ078268N	COIL	1	G1C68NGA0001	R75,76	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
L6	VLP0173	COIL	1	J0JGC0000015	R77	VLQ07828N2	COIL	1	G1C8N2ZA0001
L7	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		R78	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P111	VJP2824A010	CONNECTOR (MALE)	1	K1KA10A00007	C104-07	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
P112	VJP1235T	CONNECTOR (MALE) 8P	1		C108	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
P121,22	VJS4329A046	CONNECTOR (FEMALE)	2		C109,10	EEUFC1A681L	E.CAPACITOR 10V 680U	2	
					C111,12	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
R113	VJP1245T	CONNECTOR (MALE)	1		C113,14	ECST1CC336Z	T.CAPACITOR CH 16V 33U	2	
R114	VJP3440B030	CONNECTOR (MALE)	1	K1KA30B00024	C115	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
					C116-20	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	5	
		MISCELLANEOUS			C121	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
					C122-26	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	5	
	VMP6525	P.C.B. HOLDER ANGLE (B)	1		C127	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
	XTV3+6F	SCREW	2		C201-03	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
					C204	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
					C205-23	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	19	
					C228-31	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
					C301	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
					C302,03	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
■ E19	VEP89137A	S MOTHER P.C.BOARD	1	(RTL)	C304,05	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
					C306,07	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
					C308-10	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
P001,02	VJS3832	CONNECTOR (FEMALE)	2	K1KBC8B00008	C311,12	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
P003-12	VJS2899A096	CONNECTOR (FEMALE)	10	K1KB96A00035	C313,14	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2	
P013	VJS4360B184	CONNECTOR (FEMALE)	1		C316	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
P014	VJS4360B144	CONNECTOR (FEMALE)	1		C318-20	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	3	
P020	VJP1883T	CONNECTOR (MALE)	1	K1KA12C00005	C321,22	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2	
P021	VJP1877T	CONNECTOR (MALE)	1	K1KA06C00004	C323,24	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
P022	VJP1883T	CONNECTOR (MALE)	1	K1KA12C00005	C327-29	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
P023	VJP1879T	CONNECTOR (MALE)	1	K1KA08C00001	C330,31	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
P026	VJS4359B050	CONNECTOR (FEMALE)	1		C332	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
P030	VJP2824A008	CONNECTOR (MALE)	1	K1KA08A00005	C333,34	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
P031	VJP1237T	CONNECTOR (MALE)	1	K1KA10A00136	C335,36	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
					C337,38	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
					C339,40	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2	
					C342	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
					C344-46	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	3	
					C347,48	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2	
■ E20	VEP89138B	SUB MOTHER P.C.BOARD	1	(RTL)	C349,50	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	2	
					C353	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
					C356	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C201,02	ECUX1H103ZV	C.CAPACITOR CH 50V 0.01U	2		C359	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C203-05	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	3		C360-70	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	11	
C206	ECKF1H103KB	C.CAPACITOR 50V 0.01U	1		C371	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
					C374	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
D201,02	MA704A	DIODE	2		C375	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
					C381	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
FL201	VLF0576	FILTER	1	J0HACH000011	C389	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
					C390	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
IC201	NJM78L12UA	IC	1	C0CBAKC00001	C391	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
IC202	NJM79L12UA	IC	1		C392	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
					C393	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
P201,02	VJS2899A096	CONNECTOR (FEMALE)	2	K1KB96A00035	C394	ECST1CC336Z	T.CAPACITOR CH 16V 33U	1	
P203	VJP3440A030	CONNECTOR (MALE)	1	K1KA30A00114					
P205	VJP3418A080	CONNECTOR (MALE)	1	K1KA80A00066	D101	MA3J14300L	DIODE	1	
P206	VJP2824A009	CONNECTOR (MALE)	1	K1KA09A00052	D102	MA142K	DIODE	1	
P207	VJP4359B050	CONNECTOR (MALE)	1		D301-04	MA142K	DIODE	4	
P210	VJP1881T	CONNECTOR (MALE)	1	K1KA10C00002					
P215	VJP3440B020	CONNECTOR (MALE)	1	K1KA20B00028	IC101	LM337T	IC	1	C0CABYG00002
P216	VJP1875T	CONNECTOR (MALE)	1	K1KA12C00010	IC102	LT1175CS8	IC	1	
P217	VJP1879T	CONNECTOR (MALE)	1	K1KA08C00001	IC103	LT1129CS8	IC	1	
P218	VJP1881T	CONNECTOR (MALE)	1	K1KA10C00002	IC104,05	TC4S66F	IC	2	C0JBAS000050
P219	VJP1877T	CONNECTOR (MALE)	1	K1KA06C00004	IC106	MC10H116M	IC	1	C0JBZZ000018
					IC107,08	MC10H131M	IC	2	C0JBZF000003
QR201-04	UN2214	TRANSISTOR-RESISTOR	4	UNR221400L	IC201	M62370GP	IC	1	C0FBBD000082
					IC202	SN104200DB	IC	1	
R201-04	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	4		IC203-05	THC4053FT	IC	3	
R205-08	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	4		IC206,07	NJM064V	IC	2	
					IC302	NJM062V	IC	1	
					IC303,04	UPC1663G	IC	2	C1CB00000329
					IC305	AN6308S	IC	1	
					IC306	UPC2726T	IC	1	
■ E21	VEP85188A	REC AMP P.C.BOARD	1	(RTL)					
					L102-04	VLF1151A132	COIL	3	
					L301-08	VLQ0163J6R8	COIL 6.8UH	8	G1C6R8J00007
					L309	ELJNAR33J	COIL 0.33UH	1	
C101	EEUFC1E331	E.CAPACITOR 25V 330U	1		L310	ELJNAR68J	COIL 0.68UH	1	
C102,03	EEUFC1A681L	E.CAPACITOR 10V 680U	2		L311,12	VLF1151A132	COIL	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R448	ERJ3GEYJ22	M.RESISTOR CH 1/16W 2.2K	1		Q5005,06	2SK1059	TRANSISTOR	2	
R450	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1						
R451,52	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R5001	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R453,54	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R5002	ERDS2TJ512	C.RESISTOR 1/4W 5.1K	1	
R455	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1		R5003	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R456	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R5004,05	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R457	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1		R5006	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R458,59	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R5007	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R460,61	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2		R5008	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R462	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1		R5009	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R463	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1		R5010,11	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
					R5012	ERDS2TJ821	C.RESISTOR 1/4W 820	1	
RY101	VSY2069	RELAY	1	K6B2CDB00006	R5013	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
RY301-04	VSY2069	RELAY	4	K6B2CDB00006	R5014	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
					R5015	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
SW101	VSS0367-02B	SWITCH	1		R5016	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
					R5017	ERDS2TJ821	C.RESISTOR 1/4W 820	1	
TG201	VJR0646	TEST POINT	1	D0X0R0000022	R5018	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
TG301	VJR0646	TEST POINT	1	D0X0R0000022	R5019	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
					R5020	ERDS2TJ271	C.RESISTOR 1/4W 270	1	
TP201	VJR0646	TEST POINT	1	D0X0R0000022	R5021	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
TP202,03	EYF6CU	TEST POINT	2		R5022-24	ERDS2TJ181	C.RESISTOR 1/4W 180	3	
TP205	EYF6CU	TEST POINT	1						
TP301-04	EYF6CU	TEST POINT	4		TP5001-07	VJR0646	TEST POINT	7	D0X0R0000022
TP307	EYF6CU	TEST POINT	1						
TP308	VJR0646	TEST POINT	1	D0X0R0000022	TPG5001,02	VJR0646	TEST POINT	2	D0X0R0000022
VR301	VRV0113B103	V.RESISTOR 10K	1		VR5001	VRV0112B502	V.RESISTOR 5K	1	
					VR5002	VRV0112B501	V.RESISTOR 500	1	
		MISCELLANEOUS							
							MISCELLANEOUS		
	VMP6527	P.C.B. HOLDER ANGLE	1						
	XTV3+6F	SCREW	2			VMP3270	P.C.BOARD HOLDER ANGLE	1	
						XNG26B	NUT	1	
						XTV3+6F	SCREW	2	
						XYNV26+K10	SCREW	1	
■ E22	VEP85040B	CYLINDER POWER P.C.BOARD	1	(RTL)					
C5001	ECA1HKK220	E.CAPACITOR 50V 22U	1		■ E23	VEP82095A	AT DRIVE P.C.BOARD	1	(RTL)
C5002	ECQB1H473JF	P.CAPACITOR 50V 0.047U	1						
C5003	ECQB1H392JF	P.CAPACITOR 50V 3900P	1						
C5004	ECQB1H473JF	P.CAPACITOR 50V 0.047U	1		C100-03	ECA1HKK330	E.CAPACITOR 50V 33U	4	
C5005	ECA1HKK220	E.CAPACITOR 50V 22U	1		C105	ECCD2H331J	C.CAPACITOR 500V 330P	1	
C5006	ECA1HKK220F	E.CAPACITOR 50V 22U	1		C106	ECCD2H151J	C.CAPACITOR 500V 150P	1	
C5007	ECA1HXLV101	E.CAPACITOR 50V 100U	1		C108	ECCD2H331J	C.CAPACITOR 500V 330P	1	
C5008,09	ECQB1H104JF	P.CAPACITOR 50V 0.1U	2		C109	ECCD2H151J	C.CAPACITOR 500V 150P	1	
C5010,11	ECCD2H331J	C.CAPACITOR 500V 330P	2		C110	ECCD2H101J	C.CAPACITOR 500V 100P	1	
C5020,21	ECQB1H104JF	P.CAPACITOR 50V 0.1U	2		C111	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C5022	ECA1HKK220	E.CAPACITOR 50V 22U	1		C112	ECCD2H101J	C.CAPACITOR 500V 100P	1	
C5023	ECQB1H104JF	P.CAPACITOR 50V 0.1U	1		C113	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
D5001-04	MA165	DIODE	4	MA2C165001VT	D100	MA151K	DIODE	1	
D5005,06	MA701A	DIODE	2		D103,04	MA151K	DIODE	2	
					D105,06	10E1	DIODE	2	
HS5001	VSC3090	HEAT SINK	1		D107	MA151K	DIODE	1	
					D110,11	MA151K	DIODE	2	
IC5001	UPC494C	IC	1	C0DAAZD00003					
IC5002	AN7805F	IC	1		L100,01	VLQEL05S101K	COIL 100UH	2	
IC5003	MC74HC04AN	IC	1	C0JAAAB000003					
IC5004	AN78N05	IC	1		P1	VJP3079	CONNECTOR (MALE)	1	
					P2	VJP1230T	CONNECTOR (MALE) 3P	1	
L5001	VLQ0242	COIL	1		P3,P4	VJP1143	CONNECTOR (MALE)	2	K1KA05A00151
					P5	VJP1231T	CONNECTOR (MALE) 4P	1	
P5521	VJP1230G	CONNECTOR (MALE) 3P	1	K1KA03A00197					
P5522	VJP1230T	CONNECTOR (MALE) 3P	1		Q100-04	2SA1486-K	TRANSISTOR	5	
P5523	VJP3079	CONNECTOR (MALE)	1		Q105,06	2SC3840-K	TRANSISTOR	2	
P5525	VJP1233T	CONNECTOR (MALE) 6P	1		Q107,08	2SA1486-K	TRANSISTOR	2	
P5526	VJP1231T	CONNECTOR (MALE) 4P	1		Q109-13	2SC3840-K	TRANSISTOR	5	
P5527	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198	Q114	2SD601A-R	TRANSISTOR	1	
P5708	VJP1143	CONNECTOR (MALE)	1	K1KA05A00151	Q115,16	2SD1385	TRANSISTOR	2	
					Q117	2SD601A-R	TRANSISTOR	1	
Q5001-04	2SB1321A	TRANSISTOR	4		Q118-22	2SA1486-K	TRANSISTOR	5	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q123,24	2SC3840-K	TRANSISTOR	2	
Q125,26	2SA1486-K	TRANSISTOR	2	
Q127-31	2SC3840-K	TRANSISTOR	5	
Q132	2SD601A-R	TRANSISTOR	1	
Q133,34	2SD1385	TRANSISTOR	2	
Q135	2SD601A-R	TRANSISTOR	1	
R100	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R101	EO025CKF6813	M.RESISTOR 1/4W 680K	1	
R102,03	ERJ6RED474	M.RESISTOR CH 1/10W 470K	2	
R104	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R105	ERG3SJ622	M.RESISTOR 3W 6.2K	1	
R106	EO025CKF6813	M.RESISTOR 1/4W 680K	1	
R107	ERJ6RBD104	M.RESISTOR CH 1/10W 100K	1	
R108	ERJ6RED394	M.RESISTOR CH 1/10W 390K	1	
R109	ERJ6RED334	M.RESISTOR CH 1/10W 330K	1	
R110-21	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
R122	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R123-34	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
R135	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R136	ERJ6RBD683	M.RESISTOR CH 1/10W 68K	1	
R137	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R138-41	ERJ6RED394	M.RESISTOR CH 1/10W 390K	4	
R142	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R143	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R144	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R145	EO025CKF6813	M.RESISTOR 1/4W 680K	1	
R146,47	ERJ6RED474	M.RESISTOR CH 1/10W 470K	2	
R148	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R149	ERG3SJ622	M.RESISTOR 3W 6.2K	1	
R150	EO025CKF6813	M.RESISTOR 1/4W 680K	1	
R151	ERJ6RBD104	M.RESISTOR CH 1/10W 100K	1	
R152	ERJ6RED394	M.RESISTOR CH 1/10W 390K	1	
R153	ERJ6RED334	M.RESISTOR CH 1/10W 330K	1	
R154-65	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
R166	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R167-78	ERDS2TJ394	C.RESISTOR 1/4W 390K	12	
R179	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R180	ERJ6RBD683	M.RESISTOR CH 1/10W 68K	1	
R181	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R182-85	ERJ6RED394	M.RESISTOR CH 1/10W 390K	4	
R186	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R187	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R188,89	EO025CKF8253	M.RESISTOR 1/4W 8.2G	2	
R190	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
R191	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
R192,93	EO025CKF8253	M.RESISTOR 1/4W 8.2G	2	
R194	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
R195	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
TP1,P2	VJR0646	TEST POINT	2	D0X0R0000022
		MISCELLANEOUS		
	VSC2298	SHIELD CASE	1	
	VSC2299	SHIELD COVER	1	
	VJR0646	TEST POINT	3	D0X0R0000022

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3253	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		P1104	VJP4033	CONNECTOR (MALE)	1	K1KA06A00162
R3255	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1						
R3257	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q1101,02	2SK1941-01R	TRANSISTOR	2	B1DEGR000002
R3259	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q1103	2SJ278	TRANSISTOR	1	
R3260	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1						
					QR1101	UN2112	TRANSISTOR-RESISTOR	1	
SW3001,02	VSS0307	SWITCH	2	K0D122A00105	QR1102	UN2215	TRANSISTOR-RESISTOR	1	
					QR1103	UN2113	TRANSISTOR-RESISTOR	1	
		MISCELLANEOUS			QR1104,05	UN2213	TRANSISTOR-RESISTOR	2	
	VMP6523	D SUB HOLDER ANGLE	1		Δ R1101	ERC12AGM334	S.RESISTOR 1/2W 330K	1	
	VMP6524	P.C.B. HOLDER ANGLE (A)	1		Δ R1102,03	ERU5TEJ100	F.RESISTOR 5W 10	2	
	VXQ0102	SCREW	12	K1YE50000008	R1104	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
	XTV3+6FFZ	SCREW	2		R1105,06	ERG2SJ220	M.RESISTOR 2W 22	2	
					R1107	VRE0206	M.RESISTOR	1	D0XGR05J0002
					R1108	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1	
					R1109	ERJ14YJ220	M.RESISTOR CH 1/4W 22	1	
					R1110	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1	
					R1111	ERJ14YJ220	M.RESISTOR CH 1/4W 22	1	
■ E28	VEP81211B	POWER 1 P.C.BOARD	1	(RTL)	R1112	ERJ12YJ100	M.RESISTOR CH 1/2W 10	1	
					R1113	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1	
					R1114	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
Δ C1101	ECQU2A474MV	P.CAPACITOR 100V 0.47U	1		R1115,16	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2	
Δ C1102,03	VCK0262K471A	C.CAPACITOR 470P	2	F1BAH4710001	R1117,18	ERG3SJ333	M.RESISTOR 3W 33K	2	
Δ C1104	ECQU2A474MV	P.CAPACITOR 100V 0.47U	1		R1119	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
Δ C1105,06	VCK0262K221A	C.CAPACITOR 220P	2	F1BAH2210001	R1120	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
Δ C1107-09	VCK0260M102A	C.CAPACITOR 1000P	3	F1BAH1020010	R1122	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1	
C1110,11	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2		R1123	ERJ14YJ474	M.RESISTOR CH 1/4W 470K	1	
C1112	VCK0293	C.CAPACITOR	1	F0A2G3350001	R1124	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1	
C1113	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1125	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
C1115,16	VCK0106K471	C.CAPACITOR 470P	2		R1126	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	1	
C1117,18	EETLD2W271E	E.CAPACITOR 450V 270U	2		R1129	ERJ14YJ474	M.RESISTOR CH 1/4W 470K	1	
C1119,20	VCK0106K471	C.CAPACITOR 470P	2		R1130	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C1121	ECA1HXL100	E.CAPACITOR 50V 10U	1		R1131	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C1125	ECUM1E474ZFM	C.CAPACITOR CH 25V 0.47U	1		R1132	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
C1126	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1		R1134,35	ERJ12YJ224	M.RESISTOR CH 1/2W 220K	2	
C1127	ECQV1H684JF	P.CAPACITOR 50V 0.68U	1		R1136	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	1	
C1128	EEUFC1H121L	E.CAPACITOR 50V 120U	1		R1137	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C1129	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1		R1138	ERJ12YJ472	M.RESISTOR CH 1/2W 4.7K	1	
C1130	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1139-41	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	3	
C1131	ECQF6222JZ	P.CAPACITOR 630V 2200P	1		R1142	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
C1132,33	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2		R1143,44	ERJ12YJ224	M.RESISTOR CH 1/2W 220K	2	
C1134	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1		R1145	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C1135	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		R1146	VRT0142	THERMISTOR	1	D4DDB3310005
C1141,42	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		R1147	ERG2SJ221	M.RESISTOR 2W 220	1	
C1143,44	ECUM1C474KBM	C.CAPACITOR CH 16V 0.47U	2		R1148-50	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	3	
C1145	VCK0293	C.CAPACITOR	1	F0A2G3350001	R1151	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
					R1153,54	ERJ12YJ683	M.RESISTOR CH 1/2W 63K	2	
D1101	YWD10XB60H	DIODE	1		R1155,56	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
D1102	TM1661S-L	DIODE	1		R1158	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
D1103	U1GU44	DIODE	1		R1159	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
D1104	FML-36S	DIODE	1		R1160	ERJ6RED224	M.RESISTOR CH 1/10W 220K	1	
D1105,06	ERA15-08	DIODE	2	B0AAMT000001	R1161	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
D1107,08	MA3200-M	DIODE	2		R1162	ERJ6RED334	M.RESISTOR CH 1/10W 330K	1	
D1110	MA152K	DIODE	1		R1163	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
D1111-13	U1GU44	DIODE	3		R1165	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
D1114,15	MA3068-M	DIODE	2		R1166	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
D1116	MA3200-M	DIODE	1		R1171,72	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2	
D1122	MA152K	DIODE	1		R1180	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
D1123,24	MA3200-M	DIODE	2		R1181-83	ERJ12YJ224	M.RESISTOR CH 1/2W 220K	3	
D1125	MA152K	DIODE	1		R1184	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
D1126	MA3068-M	DIODE	1						
D1127	SFPB-76V	DIODE	1		VR1102	VRV0111B501	V.RESISTOR 500	1	
D1128	MA1070400L	DIODE	1				MISCELLANEOUS		
D1129	MA151WK	DIODE	1						
IC1101	MC33262P	IC	1	C0DAZZZ00013		VJR1008	EARTH LUG	2	
IC1102	M51945BL	IC	1	C0EAB0000004		VJF1348	CLAMPER	1	
IC1103	M51953BL	IC	1	C0EAH00000033	Δ	VMZ0965	CAPACITOR COVER	3	
					Δ	VMZ1608	CAPACITOR TUBE	4	
Δ L1101-04	ELF21N035A	COIL	4			VSC3327	SHIELD CASE	1	
L1105	HKBS24D160M	COIL	1			VSC5003	HEAT SINK (A)	1	
						VSC5142	HEAT SINK (D)	1	
P1101	VJP2638	CONNECTOR (MALE)	1	K1KA02A00112		XYN3+C8FZS	SCREW	3	
P1102,03	VJP2639	CONNECTOR (MALE)	2	K1KA02A00205		XYE3+EF8	SCREW	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	XYN3+F6	SCREW	3		IC1012	UPC1093J	IC	1	C0DAEMC00002
	XYN3+F10	SCREW	2						
	XNG3BS	NUT	1		L1012	VLQ0479	COIL	1	
	XYN3+F8FZ	SCREW	3		L1013	VLQ0354	COIL	1	
					L1014	VLQ0479	COIL	1	
					L1015,16	VLQ0605	COIL	2	
					L1017	VLQ0354	COIL	1	
					L1018	VLQ0479	COIL	1	
					L1019	VLP0074	COIL	1	J0JDB0000002
■ E29	VEP81212A	POWER 2 P.C.BOARD	1 (RTL)		L1020	VLQ0605	COIL	1	
					L1021	VLP0074	COIL	1	J0JDB0000002
					L1022	ETS35AA4X9AD	TRANSFORMER	1	
C1004	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		L1023	ETS35AA4Y9AD	TRANSFORMER	1	
C1021,22	ECA1CXL101	E.CAPACITOR 16V 100U	2		L1026,27	VLQ0605	COIL	2	
C1023,24	EEUFC1V391	E.CAPACITOR 35V 390U	2						
C1025-34	ECQE6473KF	C.CAPACITOR 1000P	10		P1011	VJP3926B022	CONNECTOR (MALE)	1	
C1036	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		P1012	S12P-XL-HDS	CONNECTOR	1	
C1038	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		P1013	S16P-XL-HDS	CONNECTOR	1	
C1040,41	EEUFC1A682	E.CAPACITOR 10V 6800U	2		P1015	VJP4033	CONNECTOR (MALE)	1	K1KA06A00162
C1043	EEUFC1V391	E.CAPACITOR 35V 390U	1		P1016	VJP3042A006W	CONNECTOR (MALE)	1	
C1045	EEUFC1J101	E.CAPACITOR 63V 100U	1		P1017	VJP3042G003W	CONNECTOR (MALE)	1	K1KA03A00157
C1046,47	EEUFC1E331	E.CAPACITOR 50V 330U	2		P1018	VJP3042G012W	CONNECTOR (MALE) 12P	1	K1KA12A00136
C1048	EEUFC1A122	E.CAPACITOR 10V 1200U	1		P1019,20	VJP3042G003W	CONNECTOR (MALE)	2	K1KA03A00157
C1050	EEUFC1A122	E.CAPACITOR 10V 1200U	1		P1021	VJP3042G012W	CONNECTOR (MALE) 12P	1	K1KA12A00136
C1051	ECA1CXL101	E.CAPACITOR 16V 100U	1						
C1052,53	EEUFC1J101	E.CAPACITOR 63V 100U	2		Q1011,12	2SK2258-01	TRANSISTOR	2	
C1055,56	ECA1EXL101	E.CAPACITOR 25V 100U	2		△ Q1013-16	PS2561L1V1WL	TRANSISTOR	4	B3QAZ0000030
C1057,58	ECQE6473KF	C.CAPACITOR 1000P	2		△ Q1020	PS2561L1V1WL	TRANSISTOR	1	B3QAZ0000030
C1059,60	ECA1CXL101	E.CAPACITOR 16V 100U	2		Q1021,22	2SJ293	TRANSISTOR	2	B1DCGF000001
C1061	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1		Q1023,24	2SD602A-R	TRANSISTOR	2	
C1062	VCK0300470	C.CAPACITOR 47P	1						
C1063	ECA1VXL470	E.CAPACITOR 35V 47U	1		QR1001	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L
C1065	VCK0300470	C.CAPACITOR 47P	1						
C1066	ECA1VXL470	E.CAPACITOR 35V 47U	1		R1001-06	ERG2SJ220	M.RESISTOR 2W 22	6	
C1067,68	ECQE6473KF	C.CAPACITOR 1000P	2		R1007,08	ERJ12YJ472	M.RESISTOR CH 1/2W 4.7K	2	
C1069,70	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	2		R1021	ERG3SJ333	M.RESISTOR 3W 33K	1	
C1071	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1		R1025-27	ERG2SJ220	M.RESISTOR 2W 22	3	
C1072	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1		R1035-37	ERJ12YJ472	M.RESISTOR CH 1/2W 4.7K	3	
C1073	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1		R1040	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
C1074	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1041	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
C1075	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1		R1043	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
C1076,77	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2		R1044	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
C1080,81	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2		R1045	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
C1084-89	ECQE6473KF	C.CAPACITOR 1000P	6		R1047,48	ERG2SJ470	M.RESISTOR 2W 47	2	
C1090	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1050	ERG2SJ470	M.RESISTOR 2W 47	1	
C1093	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1051,52	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	2	
C1100	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1053	ERJ12YJ472	M.RESISTOR CH 1/2W 4.7K	1	
C1101	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1		R1055	VRT0142	THERMISTOR	1	D4DDB3310005
C1102	ECA1VXL470	E.CAPACITOR 35V 47U	1		R1056	ERG2SJ222	M.RESISTOR 2W 2.2K	1	
C1103	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R1057,58	ERG2SJ471	M.RESISTOR 2W 470	2	
C1104	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1		R1059	ERG2SJ470	M.RESISTOR 2W 47	1	
C1105	ECA1VXL470	E.CAPACITOR 35V 47U	1		R1060	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
					R1061	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
D1030	S60SC4M	DIODE	1	B0JBSE000024	R1062	VRT0033	THERMISTOR	1	D4DDB3310004
D1031	D8LC20U	DIODE	1		R1063	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
D1032	U05NU44	DIODE	1		R1064	ERG2SJ470	M.RESISTOR 2W 47	1	
D1033-35	D8LC20U	DIODE	3		R1065	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
D1036	D30SC4M	DIODE	1	B0JBSE000022	R1066	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
D1037,38	D8LC20U	DIODE	2		R1067	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
D1040,41	RC3B2	DIODE	2		R1068	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
D1044,45	U05NU44	DIODE	2		R1069	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
D1046	EG01C	DIODE	1	B0HAGV000001	R1070	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
D1047	U1GU44	DIODE	1		R1071	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
D1048	MA3240-H	DIODE	1		R1072	ERG3SJ333	M.RESISTOR 3W 33K	1	
D1049	EG01C	DIODE	1	B0HAGV000001	R1073	ERG2SJ180	M.RESISTOR 2W 18	1	
D1050	U1GU44	DIODE	1		R1074	ERJ12YJ220	M.RESISTOR CH 1/2W 22	1	
D1051	MA3240-H	DIODE	1		R1075	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
D1052	MA151WK	DIODE	1		R1076	ERW1PKR22	W.RESISTOR 1W 0.22	1	
D1053	D8LC20U	DIODE	1		R1077	ERG3SJ333	M.RESISTOR 3W 33K	1	
D1054	MA151WK	DIODE	1		R1078	ERG2SJ180	M.RESISTOR 2W 18	1	
D1055,56	MA3027-H	DIODE	2		R1079	ERJ12YJ477	M.RESISTOR CH 1/2W 4.7	1	
D1057,58	MA2270A	DIODE	2		R1080	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
D1059,60	ERA15-08	DIODE	2	B0AAMT000001	R1081	ERW1PKR27	W.RESISTOR 1W 0.27	1	
					R1086	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IC1011	UPC1944J	IC	1	C0DAZLB00001	R1087,88	ERJ12YJ472	M.RESISTOR CH 1/2W 4.7K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1510	MA152K	DIODE	1		R1568	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	1	
D1511	MA152WA	DIODE	1						
D1512	MA152WK	DIODE	1						
D1513	MA152K	DIODE	1						
D1515	MA152WK	DIODE	1						
D1516	MA152WA	DIODE	1						
D1519	MA152K	DIODE	1		■ E32	VEP81215A	POWER INT P.C.BOARD	1	(RTL)
D1522	MA152K	DIODE	1						
D1525	MA3051-M	DIODE	1	MAZ30510ML			MISCELLANEOUS		
D1526	MA3160-L	DIODE	1						
						VJS4033	CONNECTOR (FEMALE)	2	K1KB06B00023
IC1501	TA75S393F	IC	1						
IC1502,03	UPC1093J	IC	2	C0DAEMC00002					
P1501	VJS3042B006W	CONNECTOR (FEMALE)	1	K1KB06B00015					
P1502	VJS3042F012W	CONNECTOR (FEMALE) 12P	1	K1KB12B00030					
P1503	VJS3042B003W	CONNECTOR (FEMALE)	1	K1KB03B00007					
					■ E33	VEP80792A	AUTO OFF LED P.C.BOARD	1	(RTL)
Q1501,02	XN4501	TRANSISTOR-RESISTOR	2						
Q1503	XN4401	TRANSISTOR-RESISTOR	1						
Q1505	2SD602A-R	TRANSISTOR	1		D1	LN38GP	DIODE	1	
Q1506-10	XN4401	TRANSISTOR-RESISTOR	5		D2	VLL0029	LED	1	B3CAF0000005
Q1511-13	XN4501	TRANSISTOR-RESISTOR	3						
Q1516	2SB710A-R	TRANSISTOR	1		P1	VJP1602T	CONNECTOR (MALE)	1	
Q1517	2SD602A-R	TRANSISTOR	1		P2	VJP1596T	CONNECTOR (MALE)	1	
Q1518	2SB710A-R	TRANSISTOR	1		P3	VJP1598T	CONNECTOR (MALE) 5P	1	K1KA05A00104
QR1501	UN2211	TRANSISTOR-RESISTOR	1		R1,R2	ERDS2TJ221	C.RESISTOR 1/4W 220	2	
QR1502	UN2111	TRANSISTOR-RESISTOR	1				MISCELLANEOUS		
QR1503	UN2211	TRANSISTOR-RESISTOR	1						
QR1504	UN2113	TRANSISTOR-RESISTOR	1			VMX1223	LED SPACER	1	
QR1505	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L					
QR1506	UN2211	TRANSISTOR-RESISTOR	1						
QR1508	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L					
QR1509	UN2211	TRANSISTOR-RESISTOR	1						
R1501-07	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	7		■ E34	VEP80790A	EJECT P.C.BOARD	1	(RTL)
R1508	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1						
R1509	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1						
R1510-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4		P1	VJP1596T	CONNECTOR (MALE)	1	
R1514	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1						
R1515,16	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2		SW1	VSP0543	SWITCH	1	K0F111A00219
R1517	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1						
R1518	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1						
R1519	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1						
R1521	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1						
R1522	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		■ E35	VEP80804A	ERROR LED P.C.BOARD	1	(RTL)
R1523	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1						
R1524	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1						
R1526	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1						
R1527	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		D1,D2	LN28RP	LED	2	
R1528	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1		D3	LN48YP	DIODE	1	
R1529	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1		D4	LN38GP	DIODE	1	
R1531	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1						
R1532	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		P1	VJP1598T	CONNECTOR (MALE) 5P	1	K1KA05A00104
R1533	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1						
R1534	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1		R1-R4	ERDS2TJ221	C.RESISTOR 1/4W 220	4	
R1536	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1				MISCELLANEOUS		
R1537	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1						
R1538	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1			VMX1223	LED SPACER	4	
R1539	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1						
R1541	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1						
R1542	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1						
R1543	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		■ E36	VEP86300A	FRONT CONTROL1 P.C.BOARD	1	(RTL)
R1544	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1						
R1545	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1						
R1547	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1		BZ6001	EFBCD37C11	CRYSTAL OSCILLATOR	1	
R1549	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1						
R1551	ERJ6RBD101	M.RESISTOR CH 1/10W 100	1						
R1553	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1		C6001-06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
R1555	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		C6008	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R1557-60	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	4		C6011	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R1561	ERJ6RBD563	M.RESISTOR CH 1/10W 56K	1						
R1562	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1						
R1563	ERJ6RBD563	M.RESISTOR CH 1/10W 56K	1						


Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6020,21	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	2		QR6003-05	UN2111	TRANSISTOR-RESISTOR	3	
C6022-26	ECUX1E104ZV	C.CAPACITOR CH 25V 0.1U	5		QR6006	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L
C6050	ECUX1H103ZV	C.CAPACITOR CH 50V 0.01U	1						
C6051-79	ECUX1E104ZV	C.CAPACITOR CH 25V 0.1U	29		R6004,05	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
C6100,01	ECUX1E104ZV	C.CAPACITOR CH 25V 0.1U	2		R6012,13	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
C6102	EEVHB1A330	E.CAPACITOR 10V 33U	1		R6014	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
C6103-06	ECUX1E104ZV	C.CAPACITOR CH 25V 0.1U	4		R6018-36	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	19	
C6109	EEVHB1H2R2	E.CAPACITOR 50V 2.2U	1		R6061	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
C6111	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1		R6064	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
C6115	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1		R6065,66	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
C6116,17	ECEA1CGE471	E.CAPACITOR 16V 470U	2		R6067,68	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
C6118	EEUFC1V101	E.CAPACITOR 35V 100U	1		R6069	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
C6120	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1		R6070	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
C6121,22	ECUX1E104ZV	C.CAPACITOR CH 25V 0.1U	2		R6071	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
C6123	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1		R6072-84	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	13	
C6124	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1		R6085	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
C6125	ECA1CHG221	E.CAPACITOR 16V 220U	1		R6086	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
C6126	EEVHB1C470	E.CAPACITOR 16V 47U	1		R6087-90	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	4	
C6127	ECUX1E104ZV	C.CAPACITOR CH 25V 0.1U	1		R6091-94	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	4	
C6130-46	ECUX1E104ZV	C.CAPACITOR CH 25V 0.1U	17		R6095-97	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	3	
					R6098	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
D6001	DE5SC4M-4061	DIODE	1		R6099-01	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
D6002,03	MA151K	DIODE	2		R6102-04	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
D6005	MA704A	DIODE	1		R6105,06	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2	
D6006	DE5SC4M-4061	DIODE	1		R6107-10	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
					R6113-20	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	8	
FL6001	VLF0576	FILTER	1	JOHACH000011	R6122	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
					R6123-33	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	11	
IC6001	TE7751	IC	1	C1ZBZ0000156	R6134,35	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IC6003	TLC549IPS	IC	1		R6138-42	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
IC6011,12	YSI0908	IC	2		R6144,45	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
IC6016	NJM2904M	IC	1		R6150	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
IC6020,21	SN75C1168NS	IC	2		R6151	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
IC6022	TVHC14FT	IC	1		R6152-56	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	5	
IC6024	TVHC32FT	IC	1		R6157,58	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
IC6025	TVHC08FT	IC	1		R6161-64	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
IC6050	IDT71321L55F	IC	1	C3HBCC000002	R6165	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
IC6051-53	TVHC244FT	IC	3		R6166	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1	
IC6054,55	TC74HC4040AF	IC	2	C0JBAK000098	R6167	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
IC6056	TVHC165FT	IC	1		R6168	ERJ6RBD302	M.RESISTOR CH 1/10W 3K	1	
IC6057	TC74HC4094AF	IC	1		R6169	VRE0202H68M	M.RESISTOR CH	1	
IC6058	UPD71054GB	IC	1		R6170	ERJ3GEYJ303	M.RESISTOR CH 1/16W 30K	1	
IC6059	TVHC164FT	IC	1		R6171	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
IC6060,61	TVHC74FT	IC	2		R6172	ERJ6RED100	M.RESISTOR CH 1/16W 10	1	
IC6062	TVHC32FT	IC	1		R6173,74	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IC6063	C0JBAB000196	IC	1		R6177-98	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	22	
IC6064	TVHC08FT	IC	1		R6199	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
IC6080	LT1170CQ	IC	1		R6201	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC6082	TVHC244FT	IC	1		R6203,04	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
IC6083	XC62FP3202P	IC	1		R6207	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC6085	TVHT245F	IC	1		R6214	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
IC6087	LTC1624IS8	IC	1		R6216-19	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	4	
IC6088	TVHC32FT	IC	1		R6220-43	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	24	
					R6252-57	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	6	
L1	VLQ0576	COIL	1		R6258	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
L3	VLQ0576	COIL	1		R6259,60	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
L6001	VLQ0922	COIL	1		R6263	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
L6002	VLQ0407100M	COIL 10UH	1	G0A100H00003	R6300	ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
L6003	VLF1151A132	COIL	1		R6301,02	ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
L6004	VLQ0650M470	COIL 47UH	1						
L6005	VLP0133	COIL	1						
					TP6001-04	EYF6CU	TEST POINT	4	
P6001	VJP1152	CONNECTOR (MALE)	1	K1KA08B00140	VR6001,02	VRV0111B103	V.RESISTOR 10K	2	
P6002	VJP1244T	CONNECTOR (MALE) 4P	1		VR6003	VRV0111B102	V.RESISTOR 1K	1	
P6003	VJP3125B008	CONNECTOR (MALE)	1		VR6004	VRV0111B103	V.RESISTOR 10K	1	
P6004	VJP3409A032	CONNECTOR (MALE)	1						
P6005	VJS3886A052	CONNECTOR (FEMALE)	1				MISCELLANEOUS		
P6007	VJP3440A020	CONNECTOR (MALE)	1	K1KA20A00187					
P6008	VJP3440A008	CONNECTOR (MALE)	1			EPM5032PC-25	IC	1	C1ZAZ0001371
Q6001	2SD946A	TRANSISTOR	1						
Q6003	2SD601A	TRANSISTOR	1						
Q6004	2SK1596	TRANSISTOR	1						
QR6001,02	UN2214	TRANSISTOR-RESISTOR	2	UNR221400L					

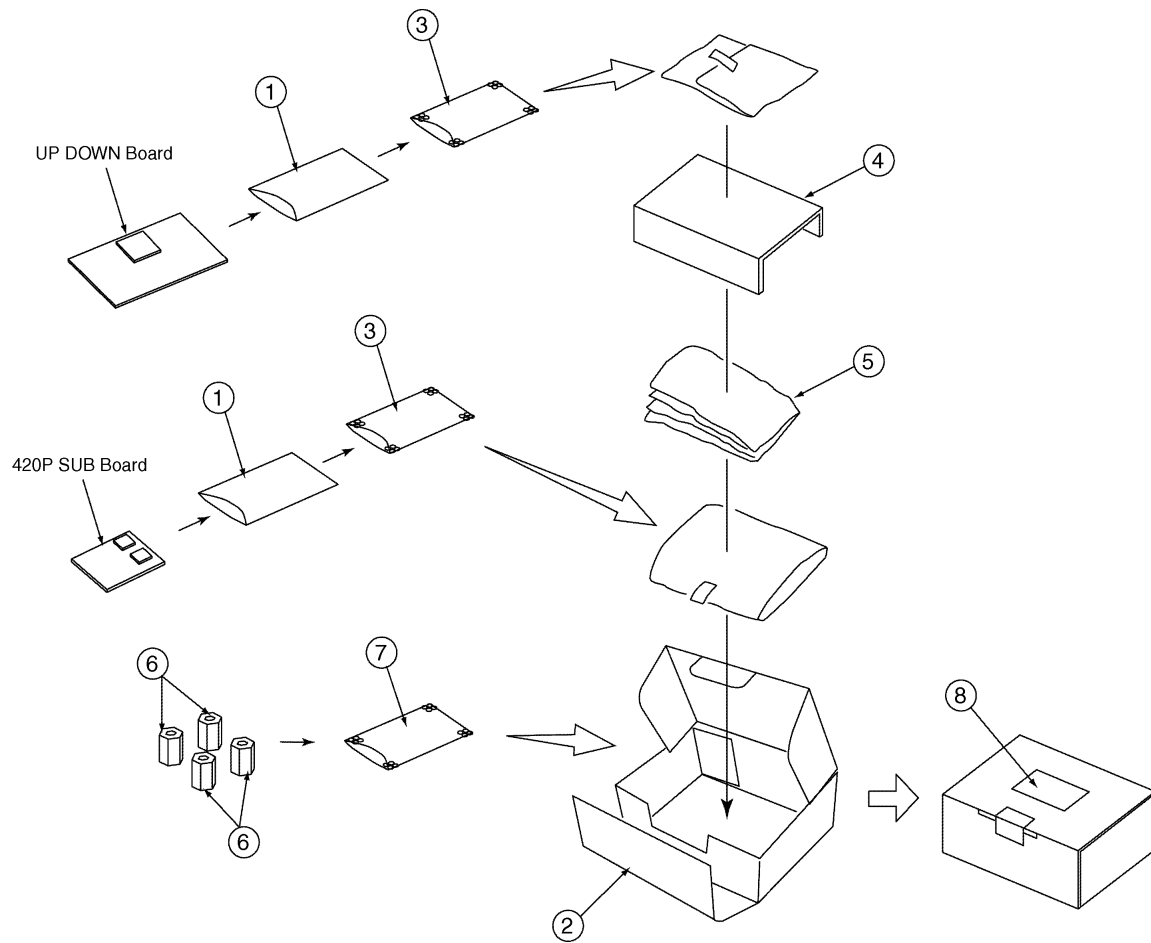
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1	LN440YCP	LED	1						
D2-11	MA152WA	DIODE	10						
IC1	TE7751	IC	1	C1ZBZ0000156					
IC5-C8	TVHC273FT	IC	4		■ E40	VEP86312A	MEM CARD CNCT P.C.BOARD	1	(RTL)
P1	VJS3515A032	CONNECTOR (FEMALE)	1						
P2	VJP3440A014	CONNECTOR (MALE)	1	K1KA14A00042	P1	VJP3513	CONNECTOR (MALE)	1	K1NA68B00023
P3	VJP3440B014	CONNECTOR (MALE)	1	K1KA14B00027	P2	VJP3440B032	CONNECTOR (MALE)	1	K1KA32B00022
P4	VJP3440A012	CONNECTOR (MALE)	1	K1KA12A00056	P3	VJP3440B030	CONNECTOR (MALE)	1	K1KA30B00024
					P4	VJP3440B006	CONNECTOR (MALE)	1	K1KA06B00043
Q1-Q9	2SB709A-R	TRANSISTOR	9						
QR1-22	UN2214	TRANSISTOR-RESISTOR	22	UNR221400L					
QR24-31	UN2214	TRANSISTOR-RESISTOR	8	UNR221400L					
R1	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		■ E41	VEP86305A	FRONT FUNCTION P.C.BOARD	1	(RTL)
R2-12	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	11						
R13,14	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2						
R15,16	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2		D1-D8	MA152WA	DIODE	8	
R17,18	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		D9	LN2162C13	DIODE	1	
R19-24	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	6						
R25-27	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	3		P1	VJP3440A014	CONNECTOR (MALE)	1	K1KA14A00042
R28	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1						
R29	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1						
R30-36	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	7						
R38,39	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2						
R40-47	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	8		■ E42	VEP86304A	FRONT MODE P.C.BOARD	1	(RTL)
R48	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1						
R50-56	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	7						
R57	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		D101-18	MA152WA	DIODE	18	
R58	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1						
R58	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		P1	VJP3440B014	CONNECTOR (MALE)	1	K1KA14B00027
R59	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1						
R59	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1						
R60	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1						
R60	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1						
R61-65	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	5		■ E43	VEP86130B	FR HP VR P.C.BOARD	1	(RTL)
R67-71	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	5						
R72	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1						
R81	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		C1	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
R100-33	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	34		P1	VJP1230T	CONNECTOR (MALE) 3P	1	
R134-41	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	8		VR1	EVUKEAF20B14	V.RESISTOR 10K	1	
SW1	VSP0789	SWITCH	1	K0F111A00283					
SW2	VSP0790	SWITCH	1	K0F111A00278					
SW3	VSP0791	SWITCH	1	K0F111A00279					
SW4	VSP0792	SWITCH	1	K0F111A00280					
SW5-W7	VSP0795	SWITCH	3	K0F111A00276					
SW8-15	VSP0864A000	SWITCH	8	K0F111A00243					
SW16-18	VSP0599	SWITCH	3						
SW19	VSP1141	SWITCH	1		■ E44	VEP86317A	FR HP JACK P.C.BOARD	1	(RTL)
		MISCELLANEOUS							
	VMX2188	SPACER	1		FL1-L3	VLF1356	FILTER	3	
					J1	VJJ0378	M6 JACK	1	K2HB103B0019
					P1	VJP1232T	CONNECTOR (MALE) 5P	1	
■ E39	VEP86306A	FRONT LED P.C.BOARD	1	(RTL)			MISCELLANEOUS		
D1,D2	LN2162C13	DIODE	2			VMC1321	EARTH METAL	1	
D3-D6	LN1271RAL	DIODE	4						
D7	LN1471Y	DIODE	1						
D8	LN1371G	DIODE	1		■ E45	VEP80653A	I/F (A) P.C.BOARD	1	(RTL)
D9,10	LN1471Y	DIODE	2						
D11,12	LN1371G	DIODE	2						
P1	VJP3950A012D	CONNECTOR (MALE)	1				MISCELLANEOUS		
R1-14	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	14			VJS2949B006	CONNECTOR (FEMALE)	1	K1MN06B00027

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VJP1243T	CONNECTOR (MALE) 3P	2				MISCELLANEOUS		
	VJP1243R	CONNECTOR (MALE)	2	K1KA03B00088					
	VJP1243G	CONNECTOR (MALE)	1	K1KA03B00087		0N1114	PHOTO INTERRUPTER	1	
	VJP3092	CONNECTOR (MALE)	1			VEE8485	CABLE	1	
■ E46	VEP80654A	I/F (B) P.C.BOARD	1	(RTL)	■ E52	VEP00E28E	SUB TR SENSOR P.C.BOARD	1	(RTL)
		MISCELLANEOUS					MISCELLANEOUS		
	0N1114	PHOTO INTERRUPTER	2			0N1114	PHOTO INTERRUPTER	1	
	ERDS2TJ181	C.RESISTOR 1/4W 180	2			VEE8486	CABLE	1	
	VJS2949B006	CONNECTOR (FEMALE)	1	K1MN06B00027					
	VJP1230T	CONNECTOR (MALE) 3P	1						
	VJP1230R	CONNECTOR (MALE)	1	K1KA03A00198					
					■ E53	VEP00P03D	LED SENSOR P.C.BOARD	1	(RTL)
							MISCELLANEOUS		
■ E47	VEP00E30B	CS-LP P.C.BOARD	1	(RTL)					
						VMX1663	DIODE BASE	1	
		MISCELLANEOUS				LN59L.KT	LED	1	
	0N1114	PHOTO INTERRUPTER	1			VEE7021	CABLE	1	
	ERDS2TJ181	C.RESISTOR 1/4W 180	1						
					■ E54	VEP80642A	DETECT BIT (R) P.C.BOARD	1	(RTL)
							MISCELLANEOUS		
■ E48	VEP00E25D	UNLOADING DETECT P.C.B.	1	(RTL)		SE310	LED	3	
		MISCELLANEOUS							
	0N1110	PHOTO INTERRUPTER	1						
	VEE7026	CABLE	1						
					■ E55	VEP80655A	DETECT BIT (L) P.C.BOARD	1	(RTL)
							MISCELLANEOUS		
■ E49	VEP80458B	CASSETTE DET SW P.C.BOARD	1	(RTL)		PH110	SENSOR	3	
		MISCELLANEOUS							
	0N1110	PHOTO INTERRUPTER	2						
	VEE7030	CABLE	1						
					■ E56	VEP80641A	SENSOR P.C.BOARD	1	(RTL)
							MISCELLANEOUS		
■ E50	VEP00E25E	SUB UNLOADING PHOTO P.C.B	1	(RTL)		SE310	LED	1	
		MISCELLANEOUS							
	0N1110	PHOTO INTERRUPTER	1						
	VEE7029	CABLE	1						
					■ E57	VEP80652A	LED P.C.BOARD	1	(RTL)
							MISCELLANEOUS		
■ E51	VEP00E28D	TR SENSOR P.C.BOARD	1	(RTL)		PH110	SENSOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E58	VEP80661A	PHOTO TR P.C.BOARD	1 (RTL)						
		MISCELLANEOUS							
	PH110	SENSOR	1						
■ E59	VEP80661B	LED P.C.BOARD	1 (RTL)						
		MISCELLANEOUS							
	SE310	LED	1						
■ E60	VEP00E04D	LOADING PHOTO P.C.BOARD	1 (RTL)						
		MISCELLANEOUS							
	0N1110	PHOTO INTERRUPTER	1						
	VEE8833	CABLE	1						
■ E61	VEP80644A	REEL I/F (S) P.C.BOARD	1 (RTL)						
		MISCELLANEOUS							
	VJS2949B013	CONNECTOR (FEMALE)	1						
	VJP3079	CONNECTOR (MALE)	1						
	VJP1230T	CONNECTOR (MALE) 3P	1						
	VJP1231T	CONNECTOR (MALE) 4P	1						
	VJP3112	CONNECTOR (MALE)	1	K1KA06B00113					
■ E62	VEP80645A	REEL I/R (T) P.C.BOARD	1 (RTL)						
		MISCELLANEOUS							
	VJS2949B013	CONNECTOR (FEMALE)	1						
	VJP3079	CONNECTOR (MALE)	1						
	VJP1230T	CONNECTOR (MALE) 3P	1						
	VJP1231T	CONNECTOR (MALE) 4P	1						
	VJP3112	CONNECTOR (MALE)	1	K1KA06B00113					
■ E63	VEP80640A	PHOTO P.C.BOARD	1 (RTL)						
		MISCELLANEOUS							
	0N1382	PHOTO COUPLER	3						
	VEE7023	CABLE	1						

PACKING PARTS ASSEMBLY (AJ-UDC3700P)

Components identified with the mark  have the special characteristics for safety. When replacing any of these components, use only the same type.



PACKING PARTS ASSEMBLY (AJ-UDC3700P)

[illegible]

ELECTRICAL REPLACEMENT PARTS LIST (AJ-UDC3700P)

[illegible]

